THE TREASURE TRAIL

SOME ADVENTURES OF
STRATFORD D. JOLLY



LONDON
JOHN LONG, LIMITED
34, 35 & 36 PATERNOSTER ROW
MCMXXXIV

" Mais les vrais voyageurs sont ceux-là qui partent
Pour partir, cœurs légers semblables aux ballons ;
De leur fatalité ils ne s'écartent
Et, sans savoir pourquoi, disent toujours : Allons ! "

BAUDELAIRE.

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CHAPTER I

HIDDEN MILLIONS

MY story begins in the Salle Privé at Monte Carlo on a day in January, 1928. I had just come in when a deep voice hailed me.

"Hulloa, Jolly!" And there was Sanders, his tall figure towering above the crowd. Edgar Sanders is not only big physically but a big man also in his profession, that of mining engineer, and is an old acquaintance of mine. Drinks were ordered and we sat down to chat.

"I'm off to Bolivia shortly," was the first information Sanders gave me. "You know what for," he added in a lower tone.

"Mining, I suppose," I replied. "I've heard you have mining interests there."

"It's not mining this time," he said, and hesitated. "Don't laugh," he went on after a moment's pause. "It's Treasure."

I did not laugh, for if there is one thing that appeals to the romantic streak in me it is a story of buried treasure. Instead, I pricked up my ears and remarked casually:

"That's very interesting. Is it big?"

"About twelve millions."

"Francs or dollars?"

"Pounds—pounds sterling," said Sanders briefly.

I gasped; who would not, for with the one exception of the "Big Fish," the golden hoard which the Incas are believed to have hidden in a rock chamber deep under the Sun City of Cuzco, the amount exceeded that of any other treasure of which I had ever heard. Even the wealth of Lima, hidden by Thompson and Bonito of the Bloody Sword on Cocos Island, did not amount to so vast a sum.

"It sounds worth while," I answered, when I had got back my breath. "Tell me about it."

"I can do better than that," said Sanders, taking a pamphlet from his breast pocket. "Here is the whole thing in print, or at least the outlines. I'll go and have a flutter and leave you to it."

The pamphlet was entitled *The Story of the Jesuit Gold Mines in Bolivia* and of the *Treasure Hidden by the Sacambaya River*, by Dr. Edgar Sanders, Ph.D., E.M. It was printed on very good paper and illustrated with fascinating photographs. The story was as fascinating as the illustrations. It began with a sketch of the early history of that queer country Bolivia. Bolivia, as you will see, if you study a map of South America, is the Switzerland of that continent, but, of course, a great deal bigger than Switzerland. It is about the size of France, Spain, Holland and Belgium and the British Isles added together. Indeed, it is the third largest of South American States, but suffers under the disadvantage of having no sea-board. Rather more than half of it is low-lying forest, but the rest is magnificently mountainous, rising to peaks more than twenty-two thousand feet high. Consequently it has every climate imaginable, ranging from pestilent tropical swamps to everlasting snow and ice. Most of the people live in a broad belt which lies between six thousand and eleven thousand feet, where the weather, for most of the year, is about as near perfection as you get on this imperfect earth.

Only a few years after the first conquistadores under Pizarro had established themselves in the rich country of the Incas, the Jesuit Missionaries set themselves to convert the Indians and to build great fortified monasteries from which they controlled the richer districts. Cut off by the tremendous chain of the Andes from the authority of the Spanish viceroy at Lima, the Jesuits made their own laws and ran things according to their own ideas. To do them justice it must be admitted that they ran them very well, and that the Indians in Bolivia had an infinitely better life than the inhabitants of the Western slopes of the Andes.

The Spanish Crown claimed one-fifth of all treasure from the New World dominions, whether gold, silver or precious stones, but the Jesuits never paid this. It seems that their idea was to found a State entirely independent of Spain.

Their continued refusal to pay tribute ended in a blockade by the Spanish authorities. The Jesuits could neither export their gold or import supplies, yet, trusting to Rome for support, they carried on. At last, in the year 1767, an order came from Spain that they were all to be deported, yet even then they still trusted to the Pope, and went on working their mines and hoarding their gold.

The end came in 1778, eleven years after the Decree of Expulsion, when Spanish troops crossed the Andes with definite orders that the Jesuits were to be deported to Europe and that all their accumulated gold was to be confiscated to the Spanish Crown.

One of the most important strongholds of the Jesuits was the Fortress-monastery of Plazuela, built at the spot where the River Khato joins the Sacambaya. Its foundations were laid in 1635, and judging by the ruins that still remain it must have been an imposing pile in its day. The Jesuits at Plazuela worked mines in the surrounding mountains, including the famous gold mines of El Carmen and Tres Tertilias, reported to be the richest in the South American continent, and their anger was great when the order arrived which ended all their activities. They held counsel and decided to evade the confiscation by hiding their mines and the gold which they had already taken out of them.

With almost unlimited Indian labour at their command, this was not a difficult task. Five hundred men were put to work and kept at it for two and a half years. Records of the time place the value of the treasure at sixty million Duros Reales (rather over £12,000,000 in modern money). This immense treasure was the accumulation of eleven years' working of the two gold mines above-mentioned, of many silver mines, and of gold and diamond washings at Santa Cruz de la Sierra.

When the Spanish troops arrived they found the great monastery deserted and no trace of the Jesuit gold. They did their best to make the Indians speak, and it is said that they tortured some of the unfortunate men. But though these Indians were scared of the Spaniards, they remained faithful to their Jesuit masters and not a word could be

wrung from any of them, so in the end the Spaniards were forced to go empty-handed away.

After Bolivar's rising against the Spaniards and the formation of Bolivia into an independent State, many efforts were made to find the Jesuit treasure. The most important was that of General Mariano Melgarejo, President of Bolivia, who, about the year 1865, went to Plazuela with a large force of soldiers and dug in various directions, but without any success.

The fact was that he and other treasure-seekers of the nineteenth century had no idea of the exact location of the hiding-place. Local tradition had it that this was in the hill called Negro Muerto on the right bank of the river. In point of fact, the treasure is hidden in the Caballo Cunca on the left bank of the river, but this fact was not known until 1905.

So far Sanders wrote with authority, but I began to wonder how he was so certain of the fact that the hiding-place was in the Caballo Cunca. However, I soon found out.

One of the deported Jesuits, Father Gregorio San Roman, had a younger brother who in 1778 was Prefect of the Peruvian city of Callao. Visiting this brother on his way out of the country, Father San Roman left with him a description of the hiding-place. The document was handed down by the Prefect to his son, who later became President of Peru, and he, in turn, left it to his daughter, Señorita Corina San Roman who, said Sanders, was still alive and living at Oruro in Bolivia. Here is a translation of the original document :

" It is a hill on the left bank of the River Sacambaya opposite the Monastery of Plazuela. It is a steep hill covered with dense forest, the top of which is flat, with long grass growing, where you can discover on the top of it, in the middle of the long grass, a large stone shaped like an egg, so big that it took five hundred Indians to place it there. If you dig underneath this stone for five cordas you will find the roof of a large cave which it took five hundred Indians two and a half years to hollow out. The roof is twenty-four cordas long and there are two compartments

and a long narrow passage leading from the room on the East side to the main entrance two hundred cordas away. On reaching the door you must exercise great care in opening. The door is a large iron one and inside to the right, near the wall, you will find an image of the Madonna, made of pure gold, three feet high, the eyes of which are two large diamonds; this image was placed there for the good of mankind. If you proceed along the passage you will find in the first room thirty-seven heaps of gold, and many gold and silver ornaments and precious stones. On entering the second room you will find in the right-hand corner a large box clamped with iron bars; inside this box are ninety thousand Duros Reales in silver money and thirty bags of gold. Distributed in the hollows on either side of the tunnel and in the two rooms are, altogether, one hundred and sixty heaps of gold, of which the value has been estimated at sixty million Duros Reales. Great care must be taken on entering these rooms, as enough poison to kill a regiment of the King has been laid about. The walls of the two rooms have been strengthened by large blocks of granite; from the roof downwards the distance is five cordas more. The top of the roof is portioned off in three distinct esplanades and the whole has been well covered for a depth of five cordas with earth and stone. When you come to a place twenty feet high, with a wall so wide that two men can easily ride abreast, cross the river and you will find the monastery, church and other buildings."

The corda is an old Spanish marine measure, supposed to be equivalent to 22′ 7″.

The San Roman family, being comfortably off, made no attempt to secure the treasure, yet kept in touch with the hiding-place through an Indian family named Ampuera who lived at the village of Cuti. The Ampueras kept watch on the place and were able to assure the San Romans that the actual hiding-place had not been disturbed.

At last, in 1905, Mr. Cecil Prodgers, an Englishman who was well known in Bolivia, met Corina San Roman who asked him if he would unearth the treasure, paying her a share in the proceeds. He agreed and for three years, 1905, 1906 and 1907, spent the whole of the dry seasons on the

work. He wrote a very interesting account of his efforts in a book called *Adventures in Bolivia*, published by John Lane, the Bodley Head, London. Real adventures, too, for he was shot at more than once, and on another occasion poisoned so that he nearly died. Sanders explained that the reason for Prodgers' lack of success was that he did not proceed in a systematic way and never made any attempt to examine the whole of the Caballo Cunca Hill for traces of artificial workings.

Prodgers' health failed and he had to return to England. There he met Sanders, and in the year 1920 turned over the whole search to him, on condition that Sanders took over his liability to the Señorita San Roman.

Treasure hunting in the wilds of South America is no cheap business. It was not until 1925 that Sanders was able to organize a small expedition, more a reconnaissance than anything else.

" When I arrived there," he had written, " I realized that I had found the proper hill. . . . The essential points in San Roman's document were absolutely correct. . . . Yet many indications made me conclude that the document had not been actually written by the Jesuit, Gregorio San Roman, himself. I surmise that the following must have happened.

" When Father San Roman passed through Callao on his way to Rome he certainly saw his brother, the Prefect. This brother he told about the treasure, with details how to find it, and it was the brother, the Prefect, who wrote down the received information. This would explain why all the essential points are correct but some details are wrong, or rather incomprehensible. It is well known that it is absolutely impossible to give an exact description of anything which has been told to one by word of mouth. In the teller's mind the picture is very clear, but a listener can never grasp it quite as clearly and is bound to confuse details.

" One of such confused details is the assumption that the actual entrance is located under the egg-shaped stone (or, at least, by reading the document I understood it to be so, and Prodgers formed the same opinion)."

" I think the egg-shaped stone was placed there merely to indicate the right hill, as some kind of mark, and that the main entrance is situated at the distance of two hundred cordas in the direction of the monastery.

" When I found out by excavation that the entrance to the chambers could not possibly be located below the egg-shaped stone, I decided to examine the entire hill in the most thorough manner possible and to cut all the ground where I thought there was any possibility of locating the entrance.

" I did a considerable amount of work in this connection, and in 1926 my efforts were successful.

" First of all I discovered a huge, artificial stone structure or filled-in cut, which in the attached plan has been named the Square Stone Heap. This is a perfect rectangle, undoubtedly made by the hand of man. It is six hundred and eighteen feet long and one hundred and twenty-eight feet wide, roughly measured. I consider it to be the roof of the cave, and under it the chambers must be situated. The exact distance from the egg-shaped stone was not measured, but rough measurements show it to be just about two hundred *cordas* away.

" I also discovered a tunnel. This, I believe to be one of the secondary entrances which are known to exist to the chambers. This is even more than a belief. In my own mind it is a certainty.

" This tunnel entrance is directly opposite the grounds of the Monastery of Plazuela, at some little distance from the ' Square Stone Heap.' Its roof is slightly above the level of the river and its floor some twenty feet below the river level. At the beginning it is some three yards wide, and two men can easily ride abreast there ; afterwards it narrows down to about four or five feet. This must be the place mentioned at the end of San Roman's document.

" After the mouth of this tunnel was discovered, we started digging out the filling, because it was filled in from the floor to the roof. After a few days' work we encountered a wooden board embedded in sheep's excrement. On one side of this board was nailed a silver crucifix, which is still in my possession. When we had taken out the filling

of the tunnel for some four yards further, we came to a wall which blocked the entire width of the tunnel and was made of loose stones, uncemented. We began to take down this wall and, after the first layer was removed, we found a stone box, or rather a small compartment, in which was placed diagonally something that on first sight looked like a round piece of wood. I picked it up, and owing to its age it fell to pieces in my hands. Apparently it was originally a wooden casing. Inside I found a piece of parchment, well preserved, on one side of which was written, in Spanish :

" ' You who reach this place withdraw. This spot is dedicated to God Almighty and the one who dares to enter a dolorous death awaits him in this world and eternal condemnation in the world he goes to. The riches that belong to God Our Master are not for humans. Withdraw and you will live in peace and the blessing of the Master will make your life sweet and you will die rich with the goods of this world. Obey the command of God Almighty our Master in life and in death. In the name of God the Father, the Son and the Holy Ghost. Amen.' "

The last sentence is in Latin.

" When I found this, I was alone except for several of my native workmen, who gathered round me as I spelt it out slowly and painfully. Although remarkably fresh, the lettering was difficult to decipher, and I was so engrossed that I did not notice how much the context appeared to disturb my workers. When they struck and refused point-blank to do any more work in that particular place, I realized that superstition still had a very considerable hold on them. No amount of persuasion, no promises, could make them change their minds. They were terrified. Only my foreman, Juan Mendizabal, and my cook, a boy of fifteen, agreed to stay with me. It was obviously impossible to go on working with them alone, and the rainy season was approaching, so I decided to abandon operations for that year, to return to Europe to organize a fresh expedition on a large scale and next time to take out with me at least fifteen reliable white men.

" The parchment which I discovered has been submitted



Silver crucifix found by Dr. Sanders in the Tunnel at Sacambaya in 1926

to the British Museum authorities, who state that they see no reason to doubt that it is what I claim it to be, and consequently perfectly genuine. It has also been examined by Professor Sir Edward Denison Ross, C.I.E., Ph.D., M.R.A.S., F.A.S.B., the Director of the School of Oriental Studies of London University, and one of the greatest living authorities on such manuscripts, and here follows his opinion :

" SCHOOL OF ORIENTAL STUDIES,
LONDON INSTITUTION,
(UNIVERSITY OF LONDON),
FINSBURY CIRCUS, LONDON, E.C. 2.

" ' In my view the parchment containing the pious warning against touching the treasure is absolutely genuine. The parchment is roughly cut, as one might expect, and the epigraphical characteristics are of the period.'

" ' (Signed) E. DENISON ROSS.'

" This document is, in my opinion, conclusive evidence that this tunnel is one of the entrances leading into the chambers where the treasure is stored. The tunnel was extremely well hidden and was thoroughly filled in with stones and debris. Apparently those who made it hoped that nobody else would find it, but, in case that did happen, they left the parchment there to frighten people away. And that it produced the desired effect even after more than one hundred and fifty years is shown by the fact that my men refused to work any longer in the tunnel.

" That the treasure is hidden at the end of the tunnel seems to be clearly indicated by the following phrase in the document :

" ' The riches that belong to God Our Master are not for humans.' The intimation is very clear :

" ' Keep away from this place, because we have hidden riches here which we don't want you to touch.' "

Considering the mentality of people some one hundred and fifty years ago, the wording of the document was a very powerful weapon against anybody who might find the tunnel.

In 1926 Sanders went out again, and did further work. He leased the ground from its owner, Señor Jacinto Aguilar, and had a legal contract drawn up which was not to expire until December 31st, 1928. In all he had spent six thousand pounds on the preliminary work, and had now formed a company called The Sacambaya Exploration Company, Limited, to excavate the treasure and convey it to La Paz, the Bolivian capital. By Bolivian law, all treasure has to be taken by its finders to La Paz where a small percentage is deducted by the Government, and the rest handed over to the discoverers.

Sanders estimated the cost of the expedition at fourteen thousand pounds, but had decided on a working capital of twenty thousand pounds so as to allow an ample reserve. If the whole treasure was found he estimated that each five pound share would give a return of seven hundred and fifty pounds.

When I had finished reading all that he had written I closed my eyes and lost myself in a day-dream, imagining the excitement as the last barriers were broken down and the men plunged in and stood gaping at the sight of the piles of gold and silver. Sanders' voice roused me.

"Well, has it sent you to sleep?" he demanded in a somewhat sarcastic tone.

"Quite the reverse," I retorted. "It has made me horribly restless. I'd give a lot to be in a show like this." Sanders sat down.

"Would you like to come?"

"There's nothing in the world I should like better," I told him earnestly.

"And I should like to have you with me. You know the country. You have roughed it in South America." This was true, for, although I had never actually been in Bolivia, I had at one time made my living as *gaucho* (cowboy) on a big estancia in the Argentine. At any rate I knew some Spanish and the ways of the people. Yet I shook my head.

"I'm afraid there's very little chance," I told him mournfully. In point of fact I had not the slightest hope of being able to get away, and yet I could not bring myself to

say so. I suppose there must be some strain of Norseman or buccaneer in my blood, for I fairly tingled to go.

"Tell me more," I went on. "What sort of equipment are you taking?"

"A lot of stuff," said Sanders, "compressors, cranes, dynamite, gas masks, even a diving suit."

"What's that for?"

"In case the tunnel is flooded. I have a notion that there may be a tunnel right under the bed of the river. Then I'm taking arms, rifles and revolvers." I nodded.

"You'll certainly need them if you do find the stuff. I shouldn't wonder if a couple of machine-guns would come in handy."

"A good idea," Sanders agreed. "See here, old man, you'd better make up your mind to come."

"You don't need to persuade me. I'm mad to come. Tell me, are you quite sure nobody has been poaching on your preserves while you have been away?"

"No, a month ago I received a cable saying everything was all right, and I filled in the tunnel with large tree trunks and covered them with earth, and stones. The man who tries to move any of them will not need to worry further about treasure, for before I left I mined the entrance." I sighed.

"I almost wish you hadn't told me anything about it. You have thoroughly unsettled me."

Sanders smiled. "In any case," he said. "I am not going away for a few days, so think the matter over, and if you can arrange it—come along." Then he left me.

I thought the matter over very carefully and decided that if I could arrange certain business affairs in time, I would go—I was sick and tired of Monte Carlo life, and the chance of a six to eight months' trip on an adventure of this description, with all expenses paid, does not come one's way every day.

I won't go into explanations. Let it be enough to say that the difficulties were cleared from my path and that on the very next day I was able to ring up Sanders and tell him that I could come.

"Good man! That's splendid," he answered warmly.

" Come down at once and we will have a yarn." That, as the Americans say, was " some yarn." I don't know at what hour I got to bed, but even then I could not sleep.

Twelve Millions! Twelve millions! the words kept buzzing through my tired brain.

CHAPTER II

WE START FOR SACAMBAYA

FOR treasure seekers patience is the first of virtues, and perseverance the second. I had thought—hoped—that we should get off almost at once, but in this I was sadly disappointed, for the delays seemed endless. The people who had promised to back Sanders did not come up to the scratch, and so everything had to be started all over again, and, oh, it was work getting the money.

I had always been under the impression that Monte Carlo was the place to find gamblers, but of all those who nightly staked thousands of francs on games of which they did not know either the rules or the odds, there were precious few to be found who would take even a five-pound share in our Company. I was regarded as a fitting candidate for a lunatic asylum when I broached the subject. Of course, it was an out-and-out gamble. I never pretended it was anything else. Still, with a possible one hundred and fifty per cent dividend, it did sound an attractive gamble.

Actually the money came in from just the sources from which one would least expect it. One old lady produced twenty sovereigns, each carefully wrapped in tissue paper. She must have been hoarding them for nearly fourteen years. Clerks in businesses, servants, and small wage-earners formed themselves into little groups to subscribe for a five-pound share; in fact, nearly all the capital was eventually subscribed in small sums; often by people who could not really afford it, but who hoped the long chance would come off.

I found there were many more than I had suspected of that type of man who poses as a bluff, hearty patron of sport and who loves a flutter occasionally. Alas, it is only a pose.

"Certainly, old man, I'll put in a hundred or so—just on

the off-chance—forget about it, you know! Let me know where to send the cheque." There is no eel more slippery or harder to get hold of than that cheque; and marvellously apt are the excuses.

"Just had a bad deal, old fellow—next month, perhaps," or "Unfortunately had to help a poor devil, and it has taken all my ready," or stranger than all, "After reading the pamphlet again I find I must refuse on religious grounds!"

In these cases we considered ourselves in luck if we got five per cent of the promised amount. It is sad to realize how suddenly rich men may become poor!

Some people were unkind enough to nickname the Expedition "the Husbands' Trot."

However, the ten thousand pounds was raised to enable the Company to go to allotment, and when the prospectus appeared in a leading financial paper, with a good Editorial, then the money flowed in so fast that the Company was over-subscribed ten thousand pounds in five days, and the five-pound shares were difficult to obtain at seven pounds ten shillings!

The term Treasure Hunt is rather a misnomer, for it conjures up visions of youthful days—buccaneers, bullion, pieces of eight, and glittering jewels; but nowadays a treasure hunt is the outcome of months of careful thought and preparation, and is equipped with all the scientific instruments that can be afforded. Life is not yet an entirely commercialized affair, and the idea of the profits that may accrue is seldom, if ever, the primary motive that actuates the men who go out; naturally, dreams are woven about the finding of a treasure, and of the wonderful things that might be done—should the God of Chance prove kind—but these are common to every enterprise.

Dreams are the salt of life, and the children of dreams are the Spirits of Romance and Adventure. People are inclined to assume an outwardly sceptical pose and say:

"Oh, yes, it sounds very romantic and all that sort of thing—but—you never hear of anything being found!" What nonsense! These folk do not realize that now, more than ever before, and in all parts of the world—in Egypt, in

Ur, and in an hundred other places—discoveries are yielding objects worth much more than their weight in gold, and knowledge that is helping towards the elucidation of the mysteries of the civilizations of ancient nations.

If it had not been for so-called treasure hunts, the Rosetta Stone would never have been found by which the Egyptian hieroglyphics have been read; we should never have had the story and proof of the Flood in Ur; and what knowledge we have of Inca and Maya civilizations would never have been brought to light.

Look, for a moment, at what is yet to be discovered—it is an endless list—but here are a few examples. There are only three documents extant of pre-conquest times of the Mayas, another would be worth untold gold; Cleopatra's tomb is reputed to have been found by a Frenchman, who, failing to come to terms with the Egyptian Government on the question of the division of the spoils, refused to part with his knowledge—and died!

Where was Atlantis? What became of the civilizations which preceded the Incas? No one knows, yet the knowledge may be awaiting some plucky searcher. There are millions of acres waiting to be explored—who knows what they may yield!

The symbol called the Swastika is found everywhere in South America—its origin is supposed to be Chinese; here is a point of great interest and one demanding research. Many believe that the evidence of the Bible points to South America also as the source of the Treasures of King Solomon's Mines; there are just a few problems and adventures for anyone who cares to tackle them.

While the Company was getting its financial legs, we were flooded with applications from would-be adventurers, most of whom were quite unsuitable, but they were all interviewed, over three hundred, sifted out and sent on to Sanders for his final decision. He painted lurid word-pictures of every kind of discomfort, hardship, mosquitoes, malaria, sand-flies, hard work under a tropical sun, and a very possible death from a bandit's bullet in the event of success. Only twenty men were wanted and the task of selection was a very difficult one.

There is nothing harder than to gauge the difference between a man in civilized kit in a London office and that same man in the wilds, and one mistake may ruin a whole expedition. A candidate may be physically perfect, sober, quiet spoken and apparently amenable to discipline, but that same man after a night in a mosquito-haunted camp, may turn into a snarling, irritable brute. Another may develop a quite unsuspected yellow streak; a third—and he is the worst of the lot—may get a grouch against his leaders and infect a dozen with the germ of discontent.

The men chosen came from all classes in life. The story of the selection of Henry Macallister is worth repeating. In 1926 Henry was behind the counter in a big London shop when Sanders came in with a list a yard long and calmly suggested that he wanted six hundred pounds' worth of miscellaneous stores, and could they be ready by next day. The head of the Department was dismayed.

"The time is too short, Sir. I'm afraid it is utterly out of the question." Henry spoke up.

"I think it can be managed," he said modestly to his chief, and having gained permission to try, he worked all night long to complete the task. Next day when Sanders came in, here were his packages all neatly corded and addressed, and he personally sought out the young assistant and gave him a word of cordial thanks.

Two years later Sanders turned up again in the same department and Henry hurried to serve him.

"You're going to South America again, Sir?" he asked.

"That's it. Here's a list of what I want. Not quite so urgent this time," he added with a smile. Instead of taking the list Henry fixed his eyes on the big engineer.

"The treasure, Sir?" he suggested.

"Yes, the Sacambaya," said Sanders briefly.

"You are taking an expedition?"

"I am." Henry's eyes were still fixed on Sanders' face.

"Any chance you could take me?" he asked. Sanders stared at the young fellow.

"It's no picnic," he told him. "You'd have to work like a nigger, and the insects are pretty bad. It's blazing hot by day and often precious cold at night in those hills.

There are fevers, storms, floods. Think you could stick it ? " Henry's eyes were steadfast.

" Would it be worse than Gallipoli ? " he asked, " or the Somme ? "

" No, not worse than that."

" Then you'll take me, Sir ? "

" I'll take you. I'll let you know when we start." Sanders is not a bad judge of men, and Henry Macallister proved that fact before the year was out. He was not the least useful member of our expedition.

But some of the prospective candidates were a tough lot. There were men who smelt strongly of drink ; others who were anxious to leave their country, perhaps for their country's good ; others, again, who were obviously unfitted for any kind of hard work. I remember two brothers who thought they would be able to stand it because, as they told us, they roughed it every summer, camping up the river—if the weather was fine enough !

In the end we picked twenty-one men and, later, at Bermuda an American joined us and a Czecho-Slovakian at Sacambaya. Our numbers included a colonel, a photographer, a sculptor, a doctor, several army officers, as well as journalists, novelists, electricians and engineers. Men of all ages, and even the youngest of them had been round the world. I liked the look of them and only hoped they took the same view of me.

In a show of this sort it is essential that the various members of the expedition should get to know one another, so we arranged a weekly meeting at which we discussed all questions of kit and equipment. Many of the men had useful suggestions to offer, and when our list was complete I don't think there was much omitted. Sanders did the actual buying and the outfit, purchased in England and crated ready for shipment, weighed forty-five tons. That, of course, did not include food, which we bought in La Paz. Wheelbarrows, picks and shovels and a lot of other similar stuff were also purchased in the Bolivian capital.

We took, among other things, four Ingersoll Rand compressors for rock drilling, two complete electric light plants, one for the camp and the other for night work. We had

six cranes and tipping buckets, a hydraulic pump, a circular saw with engine complete, two winches, a diving-suit, gas masks and two Morris six-wheel tractors which Sanders considered the best vehicles for the steep and rugged tracks which in Bolivia they call roads. Besides these heavy articles we had complete cooking equipment for the camp, a quantity of medical stores and a number of tents including a big marquee fifty by thirty feet, which was to serve as a mess tent.

About this time Sanders got into touch with a scientist who had a process for discovering metals by their emanations which, he claimed, could be discerned on a photographic plate. There are dozens of gold-finding gadgets of one kind or another, and we had already had a number submitted to us, but some were obviously useless and others—to say the least of them—doubtful. I confess I was inclined to be sceptical of any means, whether physical or psychical, for the locating of precious metals, yet we were shown such proofs of the process that we were all a good deal impressed. This scientist had done important work for such firms as Vickers, Limited, and Imperial Airways, also for the London County Council. He showed us an aerial photograph of London taken for the L.C.C. in which not only the iron pipes of the existing gas and water system were accurately located, but also a number of old, disused pipes, the existence of which had been long forgotten, yet which were found exactly as he had predicted, when excavations were made.

He offered to submit to any test of his process and proposed to us that we should bury a sovereign, some silver and some iron in a field, in places unknown to him, and that he should then discover them by means of his camera. He was willing to guarantee absolute accuracy if the pictures were taken by means of his own plates and eighty per cent efficiency if any standard make of plate was used. I was all for the test, but our time was running so short that anything of the kind was out of the question. Sanders, however, submitted some forty photographs of Sacambaya to the scientist, and he located the position of the Treasure Chamber, and made the remarkable statement that it con-

tained two and a half million pounds in gold and eighteen thousand pounds' worth of silver in a chest, and that there was more treasure deposited in a tunnel leading off the chamber towards the iron door and the statue of the Madonna. He told us that it was difficult to work out the values because the photos submitted to him were *horizontal.* It was necessary, he said, to have *vertical* photos in order to locate the spot exactly. So much, he added, depended on the angle and height of the camera.

Besides the stores already mentioned we had to consider the question of kit for the members of the expedition, and the matter was very carefully thought out. Sanders knew the country and its climate and we had the experience of some of our own hard-bitten adventures to help us in the selection. Here is the list which we eventually decided on for each member of the expedition :

Tropical helmet
6 bush shirts
4 pairs khaki trousers
1 khaki drill tunic
1 short army overcoat
1 pair riding breeches
1 pair riding boots
1 pair leather gauntlets
1 hunting knife
1 housewife.

The cost of these various items worked out at twelve pounds for each man.

Everything was provided by the Company with the exception of underclothes and pyjamas. We even bought socks for the men. These were procured in La Paz and were made of llama wool. They were the most comfortable and hard-wearing socks which I ever owned, and I should fancy there might be a good market for them in England.

Tobacco, cigarettes, even letter postage was paid by the Company after the expedition reached Bolivia so that, while in that country, there was no necessity for a man to spend a penny except on personal luxuries.

A question on which there was much discussion was that

of liquor. Some of the men were keen on a rum ration, but Sanders was strongly against it, and in the end it was agreed that, once in camp, there should be no liquor at all except for use in case of illness. Personally, I don't think a rum ration would have done any harm, yet I cannot say I missed it particularly, and the same holds good with the rest of the expedition.

I have mentioned that we had a doctor in the party. He was Dr. P. B. Mellows who acted as Correspondent to the *Star*. The *Star* was interested in our venture and Mellows contributed excellent copy to the columns of his paper, as well as acting as medical officer to us all. We also had a physical instructor, Mansell by name. He was most efficient and his ingenuity in devising new tortures for us daily was beyond all praise.

We sailed from Liverpool on March 1st and everyone was delighted to be at sea after the long and toilsome preparations. It seemed to me that it was the first time for weeks that I had leisure to sit down for a quiet smoke and read, but it was not all leisure. Mansell saw to that. Every day, for at least three hours, we had physical jerks, medicine ball, deck tennis, boxing and swimming. It seemed a bit hard, but it was very good for us. At first we groused about aches and pains from stiffened muscles, but these soon grew less, our tummies grew leaner and we hardened up and became extremely fit. The exercise was good for our minds as well as our bodies, and I was really pleased to see how well the whole crowd got on together. It seemed an excellent augury for the success of our expedition.

I never saw such a dirty, untidy collection of humanity as the 3rd-class passengers ! Half an hour after the decks had been washed down they were covered with orange-peel, wasted food, cigarette ends, filth of every description. I saw one man take the trouble to walk to the rail and throw his cigarette end overboard, then resume his seat and spit vigorously on the deck.

The voyage was quite ordinary with the exception of one singularly heavy thunderstorm. A small girl of five, rather scared by the blaze of lightning, confided to me :

" I 'spect God's striking matches."

I asked her where she was going, and she told me " South 'Merica."

" Yes, but where, my dear ? "

" I don't know, but Daddy says it's the last place on Earth."

Our first stop was at Bermuda. The islands strike one as curiously restful, for motor-cars are banned there. The quiet is really amazing. Another man and I hired a horse-cab and drove round. Our driver, a mulatto, was a singularly intelligent fellow and reeled off the Latin names of every plant and flower which we passed. His knowledge of the birds and beasts was equally amazing. He showed us the Golf Course and apologized for the fact that there were only eighteen holes.

" But the drives are very long," he added in extenuation.

Then South to Panama and soon we plunged into real heat and took to our lightest clothes. The Panama Canal is an amazing piece of engineering and the towing arrangements really marvellous. Everything runs like clockwork. The way in which the Americans have abolished malaria, over a wide stretch of what was formerly one of the most deadly of fever countries, is certainly a feather in their cap. I suppose most people imagine that the Canal runs from west to east, but in point of fact, Colon at the western entrance lies to the *North-West* of Panama, the Pacific port. You will see this for yourself if you glance at the map. During the forty-seven mile passage through the Canal you are actually travelling in a *South-Easterly* direction.

I never saw so many sharks and flying-fish as haunted these waters. We called at various ports on the way South, and at each the ship was invaded by peddlers who tried to sell us Panama hats, shawls, pottery and fruit. It was amusing to notice the way in which prices dropped when the shore-bell rang. That was the minute the wise ones among the passengers waited for.

Payta was our first Peruvian port of call. This town was once sacked and burned by Drake, and here a word of warning to all visitors to Peruvian ports. Owing to the monopoly possessed by the Swedish Match Company, everyone is compelled to purchase and use Peruvian matches, a

small box of which costs threepence. There is a heavy fine for anyone caught using foreign matches ashore, and it is no use to plead ignorance of the law as an excuse. At every port are touts on the look-out for *gringos* (new-comers), who come up and civilly ask for a light, and if foreign matches are produced, promptly have the visitor run in. These gentry get half the fine.

One of our party had to shell-out a sovereign for having five English matches in his pocket, that is four shillings a piece. Heaven knows what would have happened if he had happened to possess a whole box. As for lighters, they are absolutely forbidden unless a special and expensive licence is obtained.

Payta is not a cheap town, but Lima must be the most expensive place in all the Americas. Havana used to have that record, but it simply cannot hold a candle to Lima, where the prices of the ordinary necessities of life are at least three times as high as in New York. As for the luxuries—well, we did not sample them, so I can't say.

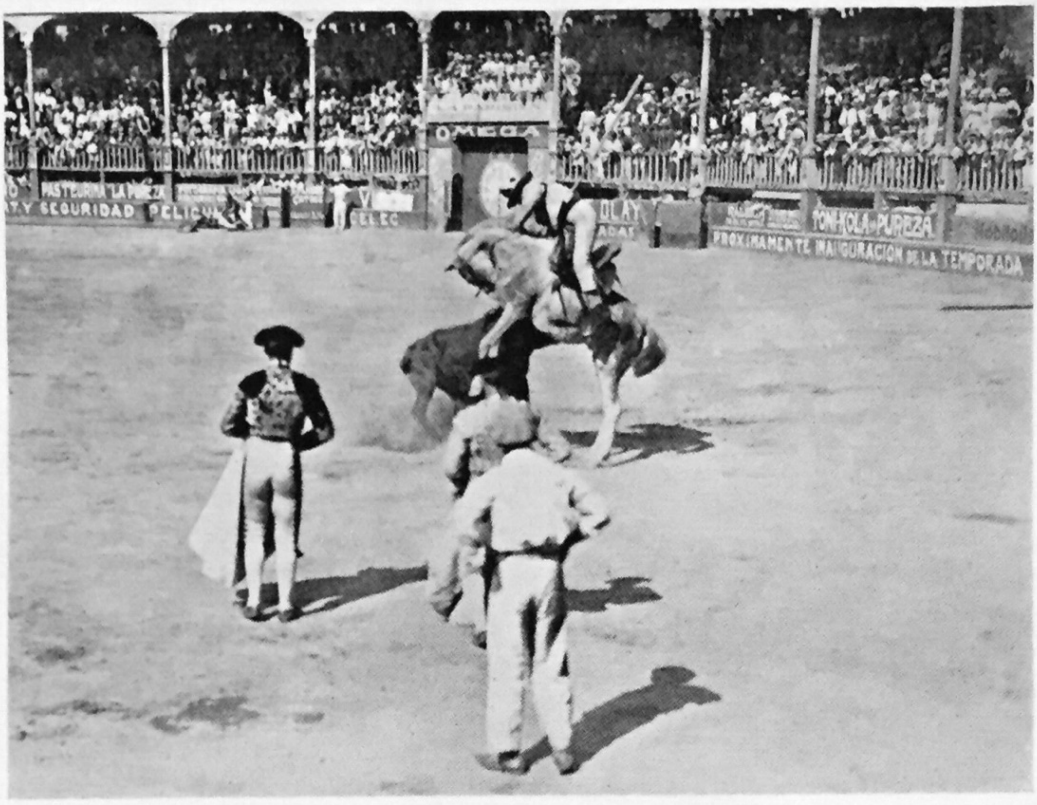
The port of Lima is Callao, a twenty-minutes' drive by car. On the way we noticed a warning to motorists which was the most striking thing of its kind imaginable. A Ford car completely and horribly wrecked had been hoisted on top of an imposing plinth by the roadside. Beneath was this inscription :

"DESPACIO SE VA LEJOS"

which, being interpreted, means "Slowly one goes far."

Friends took us out to the Country Club, which was a pleasant place, but the cabarets, which we visited later in the town, were very poor and tawdry. Any mention of our Treasure Hunt was received with lifted eyebrows and polite derision. So many unsuccessful expeditions had already passed that way that the natives were sceptical.

Arica was reached at last. Arica is the most northern seaport of Chile, and the principal port for Bolivia. It used to be quite a large town, but has suffered so badly from earthquakes that to-day it has not more than a third of its original inhabitants. All this part of the South American



Bull-fight at Lima. The horse is impaled on the bull's horns



Indian women at La Paz frightened by the " Evil Eye " of the camera

coast is being hoisted upwards by subterranean forces, and sometimes Nature moves forcibly.

The date was April 1st, as someone unkindly reminded us, yet I do not think that any of us believed that we were on a fool's errand. The proofs which Sanders had submitted were extremely convincing.

In any case this was where the real business began and we were all eager to be up and doing. The first thing Sanders did was to visit the railway station. He came back with the encouraging news that he had been able to hire a special train and five trucks to haul our gear and machinery over the mountains to La Paz. Not only that, but he had secured a sleeper for us. Orders were to hump ourselves, for the train was due to start at ten-thirty that same night. Hump it we did, and by dint of gingering up the loading-party we succeeded in getting everything aboard in good time.

Late as it was, a considerable proportion of the population of Arica was at the station to see us off. The only excitement in Arica is the arrival of a steamer or the departure of a train, and there is, as a rule, only one train a week for La Paz. When we piled into the sleeper the discovery was made that there were not sufficient berths for us all. Four had to sleep on the floor, and these four unfortunates were chosen by lot. I was not one of them. The journey by train from Arica to La Paz is the most interesting and, I might add, alarming, and the passengers' chief amazement is how the engineers ever surveyed such a line, let alone constructed it. From Arica at sea-level it climbs to a height of 14,204 feet before it begins to drop towards La Paz (10,500 feet), and all trains carry oxygen for the use of passengers whose hearts are not fitted to stand the rarefied air at these tremendous heights.

The scenery is terrific. At one minute the train is crawling along the face of a precipice with a drop of a quarter of a mile sheer beneath the window, at another it is crossing a bridge slung like a spider web across an apparently bottomless ravine. For those in charge of the line life is one long battle against avalanches, ice and rock-falls, and—strangest of all—mud slides. Not long ago a mud slide

filled a ravine and, lifting a steel bridge weighing three hundred and fifty-six tons, carried it half a mile and left it, a tangled ruin.

The whole western face of the Andes is hideously bare and desolate, for here the rainfall is small and vegetation proportionately scant. There were thousands of llamas visible, and I wondered what they found to feed on.

There was much talk of the effect the rarefied air would have upon us. The oxygen cylinders seemed to hint of unpleasant consequences. Yet barring slight headaches and breathlessness after the least exertion, none of us felt a ha'porth the worse. There was none of the buzzing in the ears or bleeding at the nose we had been led to expect, but our smuggled cigarette-lighters did not function properly. The doctor went round at intervals and tenderly felt our pulses. He seemed quite disappointed to find them normal.

The Andes are more than a mere mountain range. They resemble a gigantic dyke, or rampart, the top of which is a table-land four thousand miles long and in some places a hundred miles in width, with an average height of thirteen thousand feet. This table-land, called the Altaplanicie, is in parts a desert of snow and ice, in others, where the height is not so great, an inhabited land with a wealth of plants and wild life. Huge peaks rise from the table-land, many of them being active volcanoes. Aconcagua, highest of the whole chain, towers twenty-three thousand feet towards the skies, and there are dozens of other mountains, between that height and eighteen thousand feet.

We crossed in great comfort and reached Viache, the junction, eighteen miles from La Paz, where we left our five trucks and changed into the electric train which runs down to the Bolivian capital. La Paz, though it has a population of about one hundred thousand, is far from an ideal residence. The summer is short, the winter cold and long and, owing to the height, pneumonia is frequent and deadly.

It was market day when we arrived and the streets were gaudy with the vividly coloured skirts of the women and of the men's *ponchos*. A *poncho* is nothing but a gaily hued blanket slit in the centre and worn as a cloak. The sun

shone brightly, yet in the shade the wind was bitterly cold.

We put up at the Grand Hotel. It doesn't matter whether it is Brighton or Belgrade or La Paz—there is always a Grand Hotel. The hotel itself was not so bad. Our trouble began after we got to bed. All night police whistles blew fiercely at frequent intervals, until we wondered whether it was an Indian rising or an incursion of smash-and-grab raiders. In the morning we found that it was merely a regulation to show that the *vigilantes* (police) were not asleep on their stations. Thank God it is not my fate to live in La Paz.

The next morning we were besieged by reporters, who were disgusted when we told them that all our items of news were the exclusive property of *The Star*. They were so insistent and importunate that Sanders gave a sop to Cerberus by informing them that the Sacambaya Treasure was only a part of our proposed activities. That, indeed, was true enough, for our concession covered a good deal of ground and it was in our minds to search for the lost gold mines of the Jesuits as well as their lost treasure.

It did not satisfy the news fiends and they revenged themselves by all sorts of ridiculous and offensive articles. For instance, *El Diario* of April 3rd, 1928, had the following :

"THE JESUIT SUPERIOR AT LA PAZ IS CONVINCED THAT THE EXPEDITION GOING TO LOOK FOR THE FABULOUS TREASURE WILL NOT SUCCEED.

"Enormous is the interest aroused by reports in local papers as to the search for the fabulous riches believed to have been buried in the year 1767 by the Jesuits when they were obliged to leave Upper Peru (Bolivia), and for which the Sacambaya Exploration Company proposes to search. In relation to this we called on the Jesuit Superior in the city and asked his opinion. R. P. Luis Mania Capitan received us most kindly, and gave us the following information :—

"The whole story is merely a phantasy. It was the same day as to-day, namely April 2nd, 1767, that the Royal Decree of Charles III., was carried out, which ordered the

expulsion of the Jesuits from all the territories of Spain and its Colonies. The same day, in consequence of this, they had to depart hurriedly, and they did not have a moment to hide their possessions."

(According to all the accounts we had heard the Jesuits were evidently waiting on the doorstep, on the morning that they had to depart.) The article continued :

" J. Cretineaus-Joly, in his work, *Clemente XIV*, fully details the inexorable terms of the order of expulsion, in which the authorities of the Missions were enjoined to comply strictly with the instructions for their exile and to surrender their goods and documents. This gives some idea of the irrevocable nature and severity of the order. The last paragraph of the decree stated :—

" If you do not fulfil my orders within twenty-four hours, you will answer me with your heads ! "

" After such an order all the Jesuits had to depart, leaving only the possibility that some of them might prefer to renounce the Order, and remain in the country as private individuals. But supposing this had happened, any hypothesis in regard to the existence of a treasure falls to the ground, because if they had spent their time exploiting gold mines, or other metal, it is not logical that they would have done so with a view of accumulating riches only to hide them ; and, besides that, everybody knows that the reserves of gold that the country can boast of, for the most part, are but small, and we have confirmation of this in nearly all the auriferous metals that have been exploited in this country."

(Against this argument is the fact that the Spaniards gave freedom to the Indians who found silver mines, and thousands were discovered, that silver then was valuable and labour cheap. It is also more than possible that the Jesuits had found some of the Inca Treasure.)

" There is much to disprove all evidence of the existence of documents or plans indicating the hiding-place of imaginary treasures. The property owned by the Order in the Province of Inquisivi was relatively small, and all the income derived from it was from agriculture, truly extensive, but of small value, as the price of such commodities in those

days was laughable. Precious stones, gold, etc., the Order did not have, for, as I have said before, the property consisted exclusively of cultivated lands, bequeathed nearly always by pious people who were interested in the welfare of the Order and, furthermore, with the Christian end that the Fathers of the Order might spend their time in the celebration of Masses for the good of their souls."

Then, according to this precious article, the Jesuit Superior is made to contradict himself.

" Truly the revenue of the Order at that period reached enormous sums. Communities existed in La Paz, Sucre, Cochabamba, Oruro, and Potosi ; and in the department of Santa Cruz was the greatest number of Missions, and in the Province of Chiquitos alone were thirty-six established.

" If eventually, and this is extremely problematical, the visitors should discover this Treasure on which there has been so much speculation and discussion, in my opinion, the State should have half of it. This is merely an opinion that I give, but it is my conviction that the Expedition will find nothing."

Another paper, *La Razon* of April 4th, 1928, indulged in sarcasm at our expense.

" This particular treasure," it said, " is in Inquisivi. Many people have failed to find it. They get so tangled up in the forests where there are so many epidemics, snakes, mosquitoes, and malarial fevers that they die before they find anything.

" It appears that the ' gringos ' do not wish to say anything. Yet these people assure us that there is another and more important object of their Mission—and the Treasure is the least part. Perhaps they hope to meet a Plesiosaurus ! It is fated that of these twenty gentlemen only eleven will return. It is certain that the bones of nine scientists must be left there. It is a tribute to the earth !

" Nobody knows if they bring maps or documents, or only the smell in their nostrils of the fortune they hope to encounter. What these scientific gentlemen do not know is that in Bolivia fifty per cent of any treasure found belongs to the Government."

(Here *La Razon* blunders badly, for by the law of 1925

only two per cent of any gold found must be paid to the Government on exportation.)

" That is to say that, however much they find, they will have to surrender the greater part of it. We would harry them with all our array of lawyers, inkstands, diligent judges, and tax collectors. Is it likely in these hard times we should let them get away without paying every Boliviano ? It is not to study malaria that they have brought tons of machinery ! "

The article goes on to suggest that we should find out how to balance their budgets, stop leakages by graft, or find a means to prevent their Presidents leaving the country after their term of office and spending abroad the money they had accumulated in Bolivia.

CHAPTER III

"IT'S A LONG WAY—TO SACAMBAYA"

NONE of us worried much about the newspaper snarls. We were too busy shopping. Food, petrol, picks and shovels, wheelbarrows and the like had to be bought and packed. Also *ponchos* and those excellent llama wool socks which I have already mentioned. Meantime, Sanders interviewed the authorities in regard to getting our machinery and other goods through the Customs with as little delay as possible. These things were still in the sealed trucks at Viache.

He and I went up to Viache, accompanied by three officials who talked a great deal and smoked still more and carried heavily sealed and most formidable-looking documents. After a long palaver they broke the seals on the trucks and courteously forbore to do anything else. Not a single package was opened, so everything, including our rifles, automatics, ammunition and the rest passed through the Customs and we did not have to pay a penny.

Not a penny—well, this perhaps is an exaggeration for almost anywhere in South America a little judicious bribery goes a long way towards smooth working through the Customs. I think, too, that Sanders promised that, in the event of the success of the expedition, all the machinery should be left in the country for the use of the Government.

Viache, where five of the party had been left in charge of the trucks, is a dismal place. Perched high on a flat tableland, swept by bitter winds, there is no vegetation, not a tree or even a bush. But the views are magnificent and the cloud effects would be the despair of any artist short of a Turner. To the North Illimani flings its magnificent peak of snow twenty-one thousand feet towards the sky.

In the town itself the only object of interest is the curious old church with the sun painted in the centre of the ceiling,

and, inset, a plump, cheery face reminiscent of Bacchus. This is probably a relic of the old Inca sun worship, though quite how it comes to be in a Christian church is something of a problem.

Sanders went back to La Paz to collect our purchases, and he and the rest of the party returned to Viache by train on April 8th. That same morning we set off for Eucalyptus where we arrived at noon. Eucalyptus was our jumping-off point and here we got our trucks on to a siding and started to unload them. Pretty nearly the whole population of the place, a thousand in all, gathered to watch the operation. Eucalyptus is the clearing depot and guest house of the Caracoles Tin Mining Company. The manager and his wife, Mr. and Mrs. Johnston, were kindness itself, and the sudden influx of twenty large and hungry men did not seem to put them out in the slightest. They fed us like fighting cocks, their food being far better than that of the hotel in La Paz. We made the most of it, for we knew what was before us. At least, most of us did.

Though lower than Viache, Eucalyptus is a bleak spot and at this time of year, being the very end of summer, the nights were bitterly cold. Incidentally, drinking-water had to be brought from a distance of no less than sixty miles.

The first things to be unloaded were the Morris Tractors, for it was upon them that we depended to transport our gear to Sacambaya. In point of fact, they never got there, but why that was so I will explain later. This was the first day of real hard work for the expedition and some of us were a bit nervous, afraid that in this thin, high air, we should not be able to pull our weight. We need not have worried, for, barring a little shortness of breath, we managed very well indeed. Mr. Johnston, who watched us unload, told me afterwards how surprised he was that we *gringos* stood the height so well. I told him that it was due to Mansell's kind attentions on the voyage, and I make no doubt I was right. We were a very fit crowd.

The first snag we ran against was the fact that the tractor bodies were not wide enough to take some of the huge packing cases containing machinery, and we had to

set to work and alter them. This caused a delay of five days; however, we made a good job of it, and after assembling the motor-cycle, got away on the first stage of our journey at half-past nine on April 12th. Our destination was a place with the queer name of Pongo, a distance of sixty miles. Sanders rode the motor-cycle. Hardman, Offord, Barnett and Barclay acted as lorry drivers; Mansell, Kettlewell, Chadwick, Nolte, Gerstman, and Morphy, composed the advance party.

Those precious reporters at La Paz had assured us that the road was one of the best in Bolivia. All I can say is, God help the worst. The track—I cannot call it a road—was seamed with deep ruts and littered with boulders. Sanders had spill after spill, and although, luckily, he did not injure himself, yet he bent the 'bike rather badly. His remarks about motor-bicycles, their makers, and the idiots who rode them, were enough to scorch the vegetation, had there been any to scorch. But when he confessed that his experience of a motor-bicycle had been limited to one ride on a smooth English road, of two hours' duration, we persuaded him to abandon his misguided efforts. Offord then mounted the much maligned machine and got on splendidly until he foolishly attempted to pass one of the tractors. Having no horn, he was headed off and landed in the ditch, cutting his knee rather badly.

It was a day of delays. Since it was the tractors' first run, there were many stops for minor repairs and adjustments. Certainly no two machines ever had a stiffer trial for each was carrying its full load of one and a half tons, and the road was not only appallingly bad, but also appallingly hilly. We had to climb a pass which rose to seventeen thousand feet, then drop six thousand feet to Pongo. The scenery was magnificent, but frightfully bleak and forbidding. We had not seen a tree since leaving Arica, except a few eucalypti struggling for life in La Paz.

The last part of the road was a series of hair-pin bends with gradients in places of one in four. I did not envy Barclay, who was riding the motor-bicycle, especially since it grew dark before we reached our destination and he had no lights. The accumulators had been knocked off in one

of the many crashes. It was half-past nine before we finally pulled into the Caracoles Camp at Pongo, and the kind people there put us all up for the night.

They had installed every possible comfort. The frame huts were covered with painted canvas which kept out all draughts. Each contained a bedroom, sitting-room and bathroom. They had electric light, heat and hot water, the power being obtained from the river Khato, which roared in the gorge below. There was also a large mess room with a French billiard table. Never in my life have I more greatly appreciated the luxury of a real hot bath. It was the first since leaving the ship. It is curious how scant water is on the high parts of the Andes, but it seems that rain hardly begins to fall until the clouds from the Pacific reach the Eastern slopes.

After breakfast next day Sanders went over to the "Marta Mina" house, which had formerly been the headquarters of the mine of that name, but was now occupied only by a caretaker, and arranged billets for the whole party. Then we got the tractors unloaded and sent them back for a fresh load. From then on until the end of the month they were busy bringing cases and the remaining members of the expedition.

Meantime Sanders and I inspected the road to Quimé (five miles beyond Pongo). The rainy season, we were told, had started very late, and was not yet over. The rains had been very heavy, and had done dreadful damage to the road, which was cut zig-zagging along the mountain sides. In some places landslides or huge boulders partly blocked it, in others it was almost washed away.

At Quimé was a little hotel called the Valenzuela, primitive yet exceptionally clean. Sharp set after our walk, Sanders and I went into it for luncheon. Sanders, after consulting with the host, turned to me and asked me if I would like some caviare.

"Yes," I said, "and a fried sole and some oysters." I thought we were at least as likely to get the latter as the former. Imagine my amazement when our host, Don Julio, produced a pot of caviare of a most succulent brand.

Strengthened by the caviare and a bottle of quite pass-

able wine, Sanders and I walked on towards Inquisivi, but only a mile farther on found the road completely blocked with a mass of earth and rubble. No wheeled vehicle could pass, and we hurried back to interview Señor Urquiola, who was in charge of the roads in this Department. He promised to put on a gang of Indians at once, and vouched that he would have that landslide cleared *pronto*. Yet it was with considerably dampened spirits that we walked home, for it seemed likely that the road beyond was in an equally bad state, and there were still many miles between us and our destination. We wondered if we should ever get the tractors through, and if we were unable to do so the outlook was black indeed. All our machinery had been ordered and packed with a view to carrying it by tractor. If the road proved too bad for the tractors there would be nothing for it but mules, and an average load for a pack mule is only two hundred and fifty to three hundred pounds. Our compressors weighed, each, a ton and a half. It was almost unthinkable to be forced to strip them down to three hundred pound loads. Indeed, we did not see how this was to be done. Also there were the cranes, mighty awkward articles to carry on mule back.

On April 21st Sanders, Hilgarth and I set out, riding on mules, to inspect the road as far as Inquisivi and beyond. Our idea was to take note of all the bad places which the tractors could not pass and arrive at some idea of how long it would take to put these right. We were quite ready to use our own men and our own compressors to help in the work.

So far as Quimé the road showed great improvement since our last visit. Señor Urquiola had been as good as his word, and it was clear that the tractors could cover this five miles in safety. We were in quite good spirits when we lunched at the Valenzuela, where we finished the caviare. Afterwards, when we reached the site of the big landslide, our spirits began to sink again, for, though the road was possible for mules, it was still hopeless so far as tractors were concerned. Beyond, it grew worse and worse, and when we came to the "Quebrada," the ravine where the climb of two thousand feet to Inquisivi begins, we stopped and

gazed at one another in dumb despair. This was no road; it was nothing but a dry torrent bed, and if one thing was more clear than another it would mean six months' work before any lorry could travel up it. There was, however, another road running along the bed of the great ravine, and this, though nothing to shout about, looked several degrees more promising than the one which climbed the hill. For the present our objective was Inquisivi, so we set ourselves to the ascent.

It was with difficulty that the mules succeeded in climbing this ghastly travesty of a highway. At the top we came on level ground, across which ran what the good folk of Inquisivi were pleased to term a motor road, and which had been started with a great flourish of trumpets some five years previously. Since then all that had been done was to clear the weeds off it. It had not occurred to anyone to bother with the considerable sections which had been washed quite away. No drain or culvert had ever been made, and, mind you, the rainy season is quite wet in this part of the world. I have seen it come down at the rate of an inch in fifteen minutes. The best thing about the whole work was the bandstand, which had been erected before the road was commenced, for the purpose of welcoming with musical honours the first car to arrive in the town. I fancy they are still waiting.

Inquisivi, which is the capital of the province of that name, is a city of eight hundred inhabitants. It possesses a hotel which bears the regal name of the "Hotel Royal," but its royalty is rather eclipsed by the fact that it has only one bedroom, and that not in the building itself, but across the street, and opening on to the street. This room contains five beds, the place of springs being supplied by strips of rawhide nailed across wooden slats. Still, I have slept in worse beds, and, fortunately for us, there were no other guests, invited or uninvited.

It was growing dusk when we arrived, and the hotel keeper was full of regrets that we were so late. He told us that the sub-Prefect had ridden out to meet us with the band, but after waiting till five o'clock, had given us up and gone home. We had no regrets about the band. Our

only anxiety was for dinner, which was forthcoming without undue delay. And as we sat down electric lights were switched on—this in our especial honour, for the supply of juice appears to be limited. Sanders cheered up.

"If they bring out their band in our honour they'll be willing to help us with the road," he declared. "As soon as we have finished dinner we'll call on this sub-Prefect." We agreed and started. The town did not run to street lights and it was precious dark outside. In the darkness we blundered into a stout gentleman, who informed us that he was President of the Municipal Council, and who requested us to follow him. He led us up a side street, through an empty market place, and up a flight of stairs into a large well-lighted room with a dais at one end, which he invited us to ascend. Then a drum beat in the market place and all the notabilities of the place appeared. The judge, first, then the Chief Attorney, the Padre, the Councillors and the villagers, until the hall was quite full. The sub-Prefect arrived last. Poor man, he had gone to bed, but had been roused out and compelled to attend.

The palaver then started by our friend the President saying that he knew we needed a motor road and that they, the people of Inquisivi, were most willing to do all in their power to help. They knew that the lack of a good road was losing them trade and the town could not expand, which, he added, was ridiculous, seeing that Inquisivi was capital of the Province. Sanders responded in fluent Spanish. He agreed with all the President had said, but pointed out that it was essential for us to get to Sacambaya with all possible speed, so as to complete the work before the next rains. He added that he thought the lower road looked the more promising of the two.

This is where he dropped a full-sized brick. At once everyone was on his feet, full of expostulations, and it took all the efforts of the Chairman to restore order. When quiet was obtained, the Chairman pointed out that, if the lower road were made good, no one would ever come to their city perched two thousand feet above it, and that all hope of trade and expansion would vanish. Everyone made speeches, very good speeches some of them, and the keynote

of all was intense determination to advance their own capital. If only these South Americans could work as well as they talk, what a country it would be!

The meeting lasted two hours, and ended with an invitation for us three to breakfast with the sub-Prefect, who seemed to have no hard feelings about having been pulled out of his bed. We accepted that, but when at seven-thirty in the morning a note was pushed under our door containing a cordial invitation to dine with the Council, we struck. But at breakfast the sub-Prefect was so urgent that we were forced to accept.

Then we rode out to inspect the road, accompanied by everyone who could muster any sort of mount, about forty in all. We knew it was pure waste of time, but could not afford to antagonize these good people. Although it was Sunday there were at least two hundred and fifty Indians at work. Of course they had been sent out to impress us, and really they were rather impressive as they formed up in two lines with their picks or shovels over their shoulders, and cheered lustily.

"*Viva* Sanders! *Viva* Inquisivi! *Viva* la Provincia!" The whole show was quite well stage-managed; they looked on us as direct representatives of the British Government and able to perform miracles.

Lunch awaited us by the roadside. Not so bad under the circumstances, for, besides the bread and tinned salmon, there was beer. And after lunch another council of war, or rather of roads. Their suggestion was that they should mend the road from Inquisivi to this point by the time we had made good the stretch from Pongo to the Quebrada. Then both of us were to tackle the Quebrada Hill. It was madness, for we knew that it must take months to make a motor road up that awful steep, yet we promised to do what we could, and Sanders afterwards sent two of our party, Chadwick and Shotton, to survey and trace out the road for the Inquisivists.

Towards the middle of the afternoon we remounted for the return ride. The Padre galloped ahead and reached the bandstand, which he climbed, and there unfolded the Bolivian flag, which is red, yellow and green. (Red for the

Revolution, yellow for the riches of the country, green for its hopes of the future.) We were then formed up into columns of four, Sanders, Hilgarth, I and the sub-Prefect in the lead.

A curious sound like distant gongs broke forth. It was caused by a small boy lustily smiting the church bells with an iron bar. The bells lay on the ground, and by their appearance had been there for some time. They had never been mounted in the church tower. One more instance of *Mañana*. The rest of the inhabitants added to the din by cheering vigorously, and the women who were too old to shout threw confetti. After a triumphal march three times round the grass-grown square we had to shake hands with everybody and were then allowed to depart to the hotel. We had an hour to wash and rest and at six o'clock were summoned to the feast, which was laid in the long room serving as the bar.

A flower-strewn table was laid for twenty-four people, and the dinner was quite unexpectedly excellent. Since we had not yet reached Sacambaya, the Prohibition rule was not enforced, and we had an orgy of a cocktail apiece as well as some very passable beer. Up on these heights one is always hungry, and a dinner like this was a real treat. Apparently everyone else was equally hungry, for there was precious little conversation during the meal, and that was just as well for Hilgarth and myself, as at that time our Spanish was not very strong. Yet we managed to get the gist of most of the speeches.

After the speeches we were invited to the Padre's house, where we were regaled with a locally made liqueur and more beer. Two of the local musicians, specially invited in our honour, gave us violin and mandolin duets, and the quality of their music was surprisingly good. The Padre was a man of intelligence and education. He had, I suspect, a good deal of influence and practically ran the town. We got off to bed at eleven, but that was by no means the end of the revels, for at two in the morning we were awakened by shouts of " *Viva* Dr. Sanders ! " and later still mandolin and guitar, now somewhat the worse for beer, faded down the dark street.

We were up early for we were anxious to get a quiet look at the lower road, but unfortunately all three mules had each cast a shoe, so we were delayed until half-past ten, waiting until the local blacksmith could effect repairs. When at last we got off, the drum began to beat again and, behold, all the schoolboys of the place, headed by their two teachers, were marching off with picks on their shoulders, valiantly intent on doing their bit on the road. It looked as if Inquisivi's patriotism was to have some solid results. We heard afterwards that the sisters of the youngsters who had so nobly gone to work, were not pleased when it was suggested that they should carry out luncheon to their brothers.

You can gather some impression of the state of the track when I tell you that it took us a full hour to get our mules to the river bed at the bottom of the ravine. Then we started our inspection of the lower road. It may have been better than the hill road, but that was all that could be said for it. It was totally impossible for any form of wheeled traction, and it would have taken a couple of hundred men the whole of the dry season to make it so. That was definite, and we realized that we must make the best of a bad job, and use mules to reach our destination. We returned to Quimé and interviewed Señor Urquiola. Urquiola was an educated man who had spent seven years in the States and talked perfect English. With him Sanders made a contract to move all our stuff to Sacambaya in a month—that is by May 24th—at a price of nine shillings and sixpence per *quintal*, a *quintal* being just one hundred pounds. To do this he told us he would have to employ a special heavy mule train, which he would obtain from La Paz.

It was plain that a great mistake had been made in bringing out the tractors and thinking that they could possibly pass over narrow mule trails along precipitous mountain sides. Even the motor-cycle was an equally impossible vehicle in this country.

CHAPTER IV

THE SQUARE STONE HEAP

THE task of breaking up our great cases and making the contents up into mule loads of two hundred pounds each looked as if it would be long and difficult, and Pongo was by no means an ideal spot for such work. Pongo lies in a hole surrounded by snow-covered peaks, and gets sun for only a very few hours each day. It owes its existence to the Caracoles Tin Mine, and consists of the Camp, with its white manager and engineers, a small native population, and a couple of inferior stores.

The mine itself lies three miles away up in the mountains, at a height of no less than seventeen thousand feet, and is connected with the camp by an overhead cable way. I took a trip there and back in one of the great ore buckets, a cold and dirty journey, during which one passes across a couple of frozen lakes and a glacier. The tin ore is extremely rich. It would not pay in this remote place unless it was. Bolivia produces more than a third of all the world's tin.

The whole of our expedition was at Pongo, with the exception of two men who had been left at Eucalyptus to superintend the loading and despatch of the tractors. As soon as the last of the stores arrived at Pongo these two came also, and since accommodation was limited, six tents were erected. Then we all got to work on dismantling the machinery and making up the mule loads.

Our problem was the compressors, of which there were four. It was plainly out of the question to dismantle them, for although we had good engineers among us, it would be impossible to re-assemble them without a proper workshop. After a long consultation it was decided that the only way to deal with them was to lighten them as much as possible by taking off the tanks, then man-handle them down to

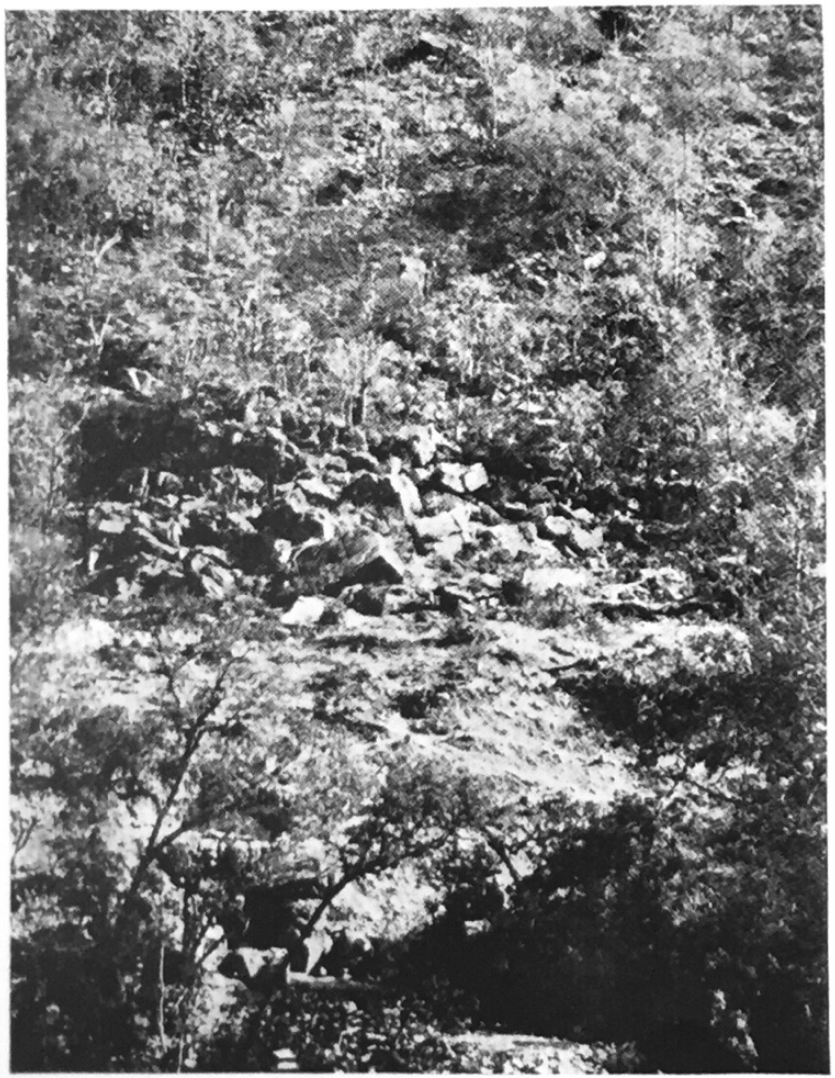
Sacambaya. The same applied to the small engine which we proposed to use for "hydraulicing." I had better explain what I mean by that term. The engine resembled a fire-engine, which drove a heavy jet of water through a nozzle, the jet being used to clear away rubble after dynamiting rock, or to wash down a bank of earth. In California gold is obtained by washing down gold-bearing strata in this fashion. Gerstman, the pessimist of the party, was not hopeful about our plan.

"It will not matter if you break one or even two compressors, you will then have two left at the end of the journey, and as for the hydraulicer, as it is on springs it will bounce, and when you get it there you will have some nice little bits left for a museum," he prophesied grimly.

But we had no choice, so Hilgarth, Hardman, Barclay, Stead and Herron were detailed for the task, and with twenty Indians and four bullocks set out on their heart-breaking journey. We were not long in following. On May 1st we had news that the road was fit for the tractors as far as Quimé, and since it had been arranged that the mule train should start from there, we hastened to push the material forward. On May 3rd, after seeing the first loads off, Beart, Mansell, Sanders and I set out for Sacambaya so as to make ready for the arrival of the loads. Sanders was to act as guide.

The distance was only about thirty miles, not so far as from London to Reading, but in Bolivia distances are not measured by mile stones. It would have been far easier and quicker to shift ourselves and our goods from Land's End to John o' Groats than to cover those awful miles from Quimé to Sacambaya.

Since our own mules were in poor condition, we hired three for the journey. Sanders had his own horse, which was in good enough condition but was a little stiff on one fetlock. What with difficulty in finding saddles and one thing and another, it was eleven in the forenoon before we got away. We took the lower road so as to avoid the long and toilsome climb to Inquisivi. This runs at the bottom of the valley, along the edge of the river Khato. I call it a road. Of course it was nothing of the sort, merely a mule path,



The Square Stone Heap



The entrance to the Tunnel
(marked with a cross)

steep, broken and twisting. My saddle had a rotten old girth which it was impossible to keep tightly cinched, with the result that going uphill I gravitated towards the tail of my beast and, downhill, nearly shot over his ears. Quite early in the day it began to rain. It came down in torrents, and before we had gone five miles we were all soaked to the skin.

Not that this mattered, for whatever the weather we were bound to be wet. Believe it or not, we had to cross that infernal river no fewer than twenty-three times. The Khato varies from a hundred to perhaps three hundred yards in width, and its bed is of boulders. Large boulders in some places, small in others, but never anything but boulders. Usually it is shallow, but now, owing to the rain, it was rising fast, and the current swirled so fiercely it threatened often to take our unfortunate beasts off their legs. Indeed two or three times one of the party did come to grief and had to be rescued with difficulty by the rest. Sanders' dog, a big, handsome Iceland wolf-hound, at each crossing trotted to the bank, had a good look at the river, then went back and took a run, landing with a flying leap far out in the flood, to lessen the distance of the swim across. The mules managed better than Sanders' horse, which began to limp badly.

The trail took us rapidly downhill, and presently we found ourselves among trees. Here and there were Indian huts with patches of sugar cane, maize and vegetables. There were birds, too, parrots, pigeons, even humming birds. The green of the country was very refreshing after the barren heights among which we had spent so many days.

We passed the ruins of an old Jesuit mill with the millstones, beautifully made, still lying there.

We had hoped to make the journey to Sacambaya in one day but in this were disappointed. Darkness caught us a good ten miles from our destination, and we were forced to camp on the bank of the flooded stream. As I have said before, we were wet through, and not only we, but our clothes, our boots and our blankets. Seldom have I spent a more unpleasant night. The only consolation was the fact that we had food in our saddle-bags, bread and tinned meat. But the bread was little better than pulp.

This was not the end of our troubles. At ten Mansell roused us to say that his mule had disappeared. He got little sympathy, and still less after we had spent two dark and dreadful hours in a vain search for the missing beast. For the rest of the night we took turns to watch lest the others got away. Mansell was very unhappy. To add to the loss of his mule he had lain in an ants' nest and got severely bitten. There were no mosquitoes.

In the morning we left Mansell sitting disconsolately by the river. Sanders presented him with a length of rope and sarcastic advice as to occupying his leisure by learning to tie knots. Beart went back to look for the missing mule while Sanders and I rode on. Beart did not find the mule, but it was picked up later by an Indian and brought in.

Sanders' horse was lamer than ever, but thinking it was just stiffness, which might wear off, we carried on. At the next ford, which was unusually deep, the beast came down, throwing Sanders into six feet of water. He and the horse both reached the bank in safety, but the poor brute was now dead lame, and there was nothing for it but for me to ride on alone and for Sanders to wait until I could send my animal back for him. The first mule train was already at Sacambaya, and one of the muleteers could bring the mule back.

So it was that I was the first of the party to reach the Hill of the Square Stone and the site of our Treasure Hunt. But not until I had crossed the Khato eighteen more times, making in all forty-two fords in less than thirty miles. The first thing I saw was the ruins of the Plazuela Monastery. A few hundred yards farther on my right was the mouth of the tunnel, and barely half a mile away the Square Stone Heap itself, with its steep sides thickly covered with brush. I pulled up and gazed at it with a queer feeling of wonder. Twelve millions in gold! Were they really hidden in this great mass of rock?

Presently I spotted the mules and the muleteer on the promontory of the fortress opposite the Monastery. It was not much of a mule train, yet it was comforting to feel that one was once more in touch with some personal belongings, dry clothes and dry food and tobacco. I sent the muleteer back, had a bathe, changed my very damp and

uncomfortable clothes, made a scratch meal and, pipe in mouth, settled down to wait for Sanders. He and Beart turned up at five o'clock, but Mansell, whose mule had not yet been caught, had been left still practising knots by the river. There was daylight left to make camp and a fire, and we settled down on the site of Sanders' old camp near the fortress. The weather had taken a turn for the better and it was a beautiful moonlight night. For a long time we sat chatting, watching delicate clouds drift slowly across the mountain tops, and then turned in, deeply grateful for good beds and dry blankets. No insects troubled us, but there were burrs and cacti in profusion, and the spines of the cacti were stiff and sharp as needles. They pierced our leather gauntlets like paper and would even penetrate our stout riding boots.

This site, pleasant as it was, did not give room for a large party, so next morning we picked a fresh position near enough to the Square Stone Heap to be handy for our work, yet not too far from the drinking water supply, which was about three hundred yards from the camp. That was one thing for which we were very grateful, a plentiful supply of excellent water. Snow-water out of a river is apt to give you a tummy ache. Sanders, ever energetic, left us, to return and see about the mule trains, and the rest of us, including Mansell, who arrived that afternoon, rather the worse for wear, set to shifting things to the new camp and clearing the brush which encumbered the site. It was late before we stopped work, and we were too tired to worry about pitching tents. We simply lit a big fire, ate our supper and rolled up in our blankets. Trees growing thickly around the camp site cut off our view of the sky, but the red flames lighted up the twisted branches covered with strange growths of lichen and orchids and made a weirdly beautiful effect.

Alas! we were only allowed a few minutes to enjoy it, for almost at once began a mass attack of mosquitoes. The pestilent insects descended upon us in clouds, and it was in vain that we tied up our heads in handkerchiefs, but there was no peace until I had the brainwave of putting my head inside my pillow-slip; it was hot and stuffy but served its purpose. In the end we were forced to cover ourselves entirely in our blankets, and though nearly suffocated

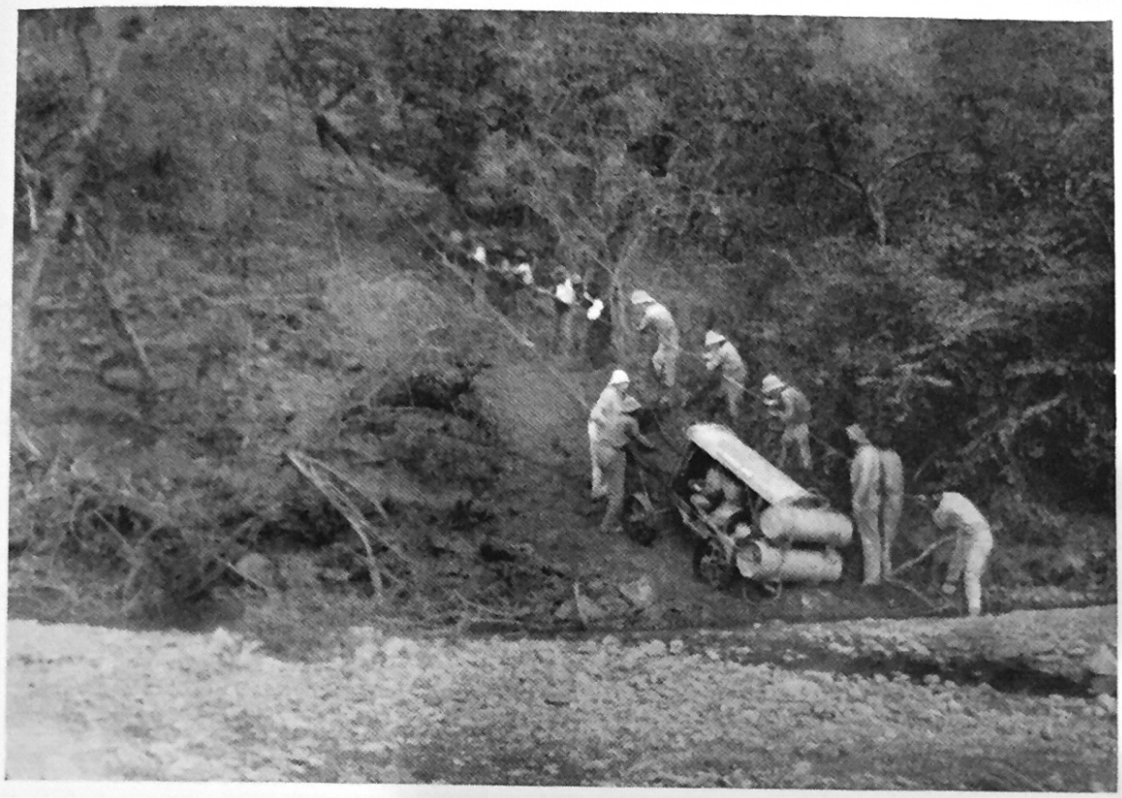
we did manage to get some sleep. This new camp site of ours was very lovely, but the infernal insects rather spoiled its charm. The very first thing we did next morning was to erect our tents and mosquito nets. During the rest of our stay at Sacambaya we always slept under nets.

For that first week our life was certainly on the simple side. Through some blunder neither plates, knives, forks, spoons nor cooking utensils had arrived. Neither had we tea nor coffee. Even our food supplies were extremely limited, consisting mainly of tinned beef and flour. Bread was out of the question, the substitute being a doughy mess cooked in an empty bully-beef tin, which we dignified with the name of flapjack. If it had not been for the pigeons we shot and roasted on wooden spits over the embers we should have gone very hungry. You will ask why we did not catch fish in the river. My answer is that there are no fish—edible fish—in these mountain streams. None of the tools had been sent, and without axes, saws, picks or shovels it was difficult to clear the camp site. We did what we could with our hunting-knives.

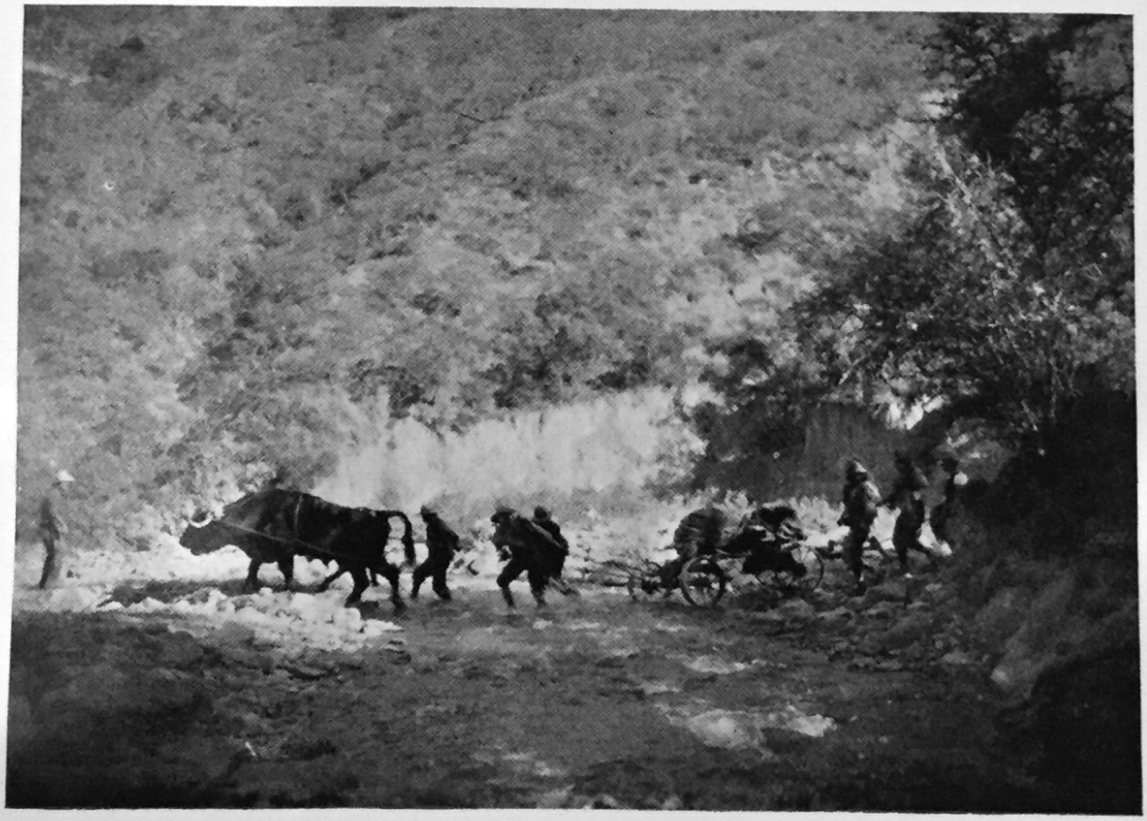
At last a mule train arrived with some real stores and news from Sanders. The compressor party were having a horrible time. Often they did not manage more than a mile of progress between dawn and dark. One compressor, we were told, had toppled over a cliff into the river, dragging two oxen with it, but, marvellous to relate, it and the animals had been retrieved unharmed. They had got it out with block and tackle, and the Indians, who had never seen such a device, were utterly amazed when they found that, by pulling downhill, the compressor came up.

Picks, shovels and bread arrived. You can hardly dream how we enjoyed that bread after a week on paste. The three of us got to work in earnest, clearing the camp site and getting things into place. Every other day a mule train arrived, each consisting of from twenty to sixty mules. As the tents went up the place began to look like a little town.

An Indian convoy passed, and from them I bought a live sheep. They did not want to sell, and I had to pay ten Bolivianos, that is fifteen shillings, which was just twice the proper price, yet it was worth it, for roast mutton tasted heavenly



Compressor arriving at the Square Stone Heap



Taking the compressors over the river

after days on bully-beef. Oh, that bully-beef! Disguise it as we might by various means of cooking, it still remained the same.

On the 13th two more of the party arrived, Morphy and Loibl, and the five of us undertook the task of getting up the big marquee. Luckily the weather was calm or we should never have managed it. Then we started making a kitchen and a mud oven. Given plenty of wood you can bake as good bread in a mud oven as in the most costly of modern kitchen ranges. Day by day more of our men arrived, until by the 21st the party was complete, with the exception of the five who were still struggling with the compressors, and Boughton-Leigh and Offord, who had not yet left Quimé. There was plenty of work for all. There was one engine-bed which weighed just under five hundred pounds, a terrific load for a mule, but it arrived safely, though several of the poor overburdened brutes slipped off the narrow trails into the chasms below. The machinery had to be assembled, a corral fenced to hold the mules and, biggest job of all, a leat or channel to be dug to bring water from the river for the hydraulic pumps. There were other small matters to be attended to, such as an incinerator for burning all the camp rubbish, and ditches round the tents to keep us from being flooded out in case of rain. Though the rains were now nearly over, you never can count with certainty on the weather in the mountainous country, and later, we were very glad of these precautions. We knew we had a long spell of work ahead, so everything was done to make the camp as comfortable as possible for its inhabitants.

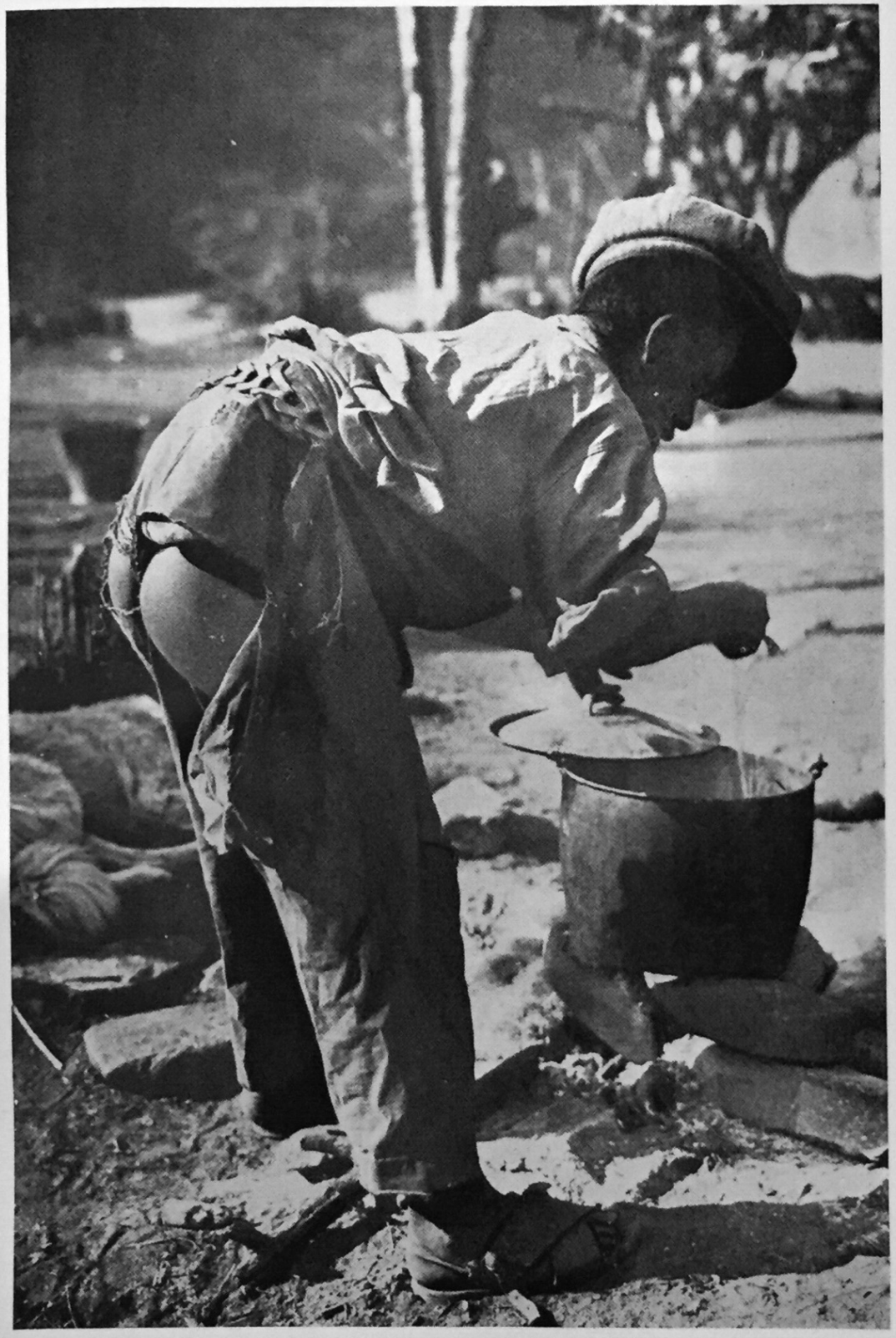
Sanders unpacked the photographs and we carefully examined the indications on these photos with a view to deciding the best point of attack on the Stone Heap, and the best positions for the cranes and compressors when they arrived. After much consultation it was arranged to cut into the hillside at a point about sixty feet above the river bed, and the cranes were placed twenty feet higher so that we could dump the excavated stuff clear of the cut. But before any sort of work could start the hillside had to be cleared of brush, and this was no easy matter for the brush was tough as wire and horribly thorny, and the hillside itself was almost perpendicular.

Before the cranes could be set up we had to cut out bases for them in the solid rock and cover these with cement. Sand and gravel had to be washed from the river bed to make the cement, and lines of iron pipes laid to carry water for the hydraulic pump. Getting the heavy machinery up the hillside was no easy matter. We first tried rigging a steel rope-way, but this was not satisfactory, so in the end we built a sort of trolley line, using the crane girders for that purpose.

The weather had turned very hot, and so far we had no Indian labour except a cook, whom I had managed to hire. We worked an eight-hour day, eight to twelve in the morning and two to six in the afternoon. The two hours nooning gave us time for a bathe in the river before lunch and a short rest afterwards, and, by Jove, we needed it. When at last arrangements had been made for a regular supply of food we started recruiting native labour, and before long had collected about eighty Indians who were camped on the other side of the Square Stone Heap near the mule corral. They were paid two to two-and-a-half Bolivianos a day, which is a rate considerably above the usual for native labour. They had rations, a pound of meat a head, and three pounds of potatoes daily and a quarter of a pound of sugar weekly. Also each was given a handful of coca leaves in the morning.

These Indians won't work without coca—at least they don't work half so well without it. They mix the leaves with lime and chew them as a sailor chews tobacco. They keep the wad in their cheek all day. Coca (Erythroxylon coca) is, of course, the plant from which the drug cocaine is made, but while the drug is so dangerous, the habit of chewing the leaves does not seem to do the Indians any particular harm. They themselves will tell you that, given a couple of handfuls of the leaves, a man can carry on with hard work for three days on end without any food at all.

Taking them all round, these Indians were good workers, and intelligent enough to carry out orders. They were, of course, terribly superstitious and, at the beginning, somewhat distrustful of the *gringo*. But decent treatment, good pay and good rations soon put that to rights, and after a month or so we could have had twice as many men if we



The Camp Cook

had needed them. Some of them told us that this place was haunted and that it also had a bad reputation for malaria, but none of us saw any ghosts, and as for fever, with reasonable precautions this did not trouble us. Indeed, the health of the whole party was remarkably good during our stay at Sacambaya.

Our chief difficulty with the Indians was to keep them at work. If there was a *fiesta* (feast day) at any village in the neighbourhood off they would go and not come back until they had spent their last penny. These *fiestas* are a curse to any employer of labour in Bolivia. Each village has its own special feast, and its people attend the feast days of every other village within reach. There they buy and sell sheep and vegetables and fruit and end up by getting drunk. On one occasion there was a big *fiesta* two days' ride from our camp, and for three days previously whole cavalcades of mules passed down the valley on their way to it. One party stopped at the camp and their spokesman presented Sanders with a police order from the prefect of the neighbouring province of Cochambamba, bidding him allow two of our men who were members of the village orchestra to go to the feast. Sanders explained that we were in the province of Inquisivi and that, therefore, the Cochambamba prefect had no jurisdiction. The man would not take no for answer so was forcibly helped down the hill and a shot fired over his head. He ran like a rabbit, amid chuckles from our Indians.

At home one often hears how rife is gossip in a country village, but Bolivia has England beat to a frazzle in this direction. We kept an armed guard patrolling the river bed by day and two white men were on guard at night. At once the rumour spread far and wide that we were keeping passers-by out of the camp so that they should not see how badly we treated our workmen. Over one of our pumps we had fixed six four-inch iron pipes in order to protect it from falling rocks, and as soon as this was noticed the story went out that we had mounted cannons to protect the camp. It was amusing to watch Indians passing at a double until they considered themselves beyond the danger zone. Sanders was not at all afraid of pilfering by Indians, who

as a rule are very honest folk. What he did fear was that some malicious attempt might be made to damage our machinery or to set light to our petrol, of which we had a dump of about a thousand gallons. Petrol is precious stuff in these Bolivian wilds, and I shudder to think what that thousand gallons had cost us in freight alone.

That there were bad characters in our neighbourhood we had proof, for one day a very superior young Indian riding a good mule stopped at the camp and civilly asked to see Sanders. The man pulled a roll of notes from his pocket, five hundred Bolivianos in all (that is about thirty-five pounds), and asked Sanders to take charge of it for him. He explained that a gang had threatened to rob him and cut his throat. He refused any sort of receipt for the money, and also left his concertina for safe custody. At intervals he came back and drew his money as he required it, but each time insisted on staying and doing a couple of days' work in return. And then they will tell you that the Indian has no sense of gratitude.

The Indians are accustomed to work ten hours a day so we did the same. We were up at six every morning and did not knock off work until six at night. Men who were working as hard as we had to be well fed, and we did feed well. Here is a typical day's fare :

BREAKFAST. Eggs, porridge, liver and bacon, bread and butter, tea.

LUNCH. *Puchero* (a kind of stew with vegetables), potatoes, cabbage, tomatoes, lettuce, biscuits and cheese, tea or coffee.

DINNER. Beef or mutton, beans, rice, stewed dried prunes or apples, fresh fruit.

Custard-apples, oranges and pineapples were plentiful up to the end of July, but after mid-winter they became scarce. During the hot weather we had much difficulty in keeping fresh meat so, when it was in danger of going bad, it was cut into strips, salted and hung out in the sun to dry. This is *chargui*, equivalent to the *biltong* of South Africa. *Chargui* is the food of thousands of *gauchos* who ride cattle on the plains of the Argentine and Uruguay.

We had brought a stock of seeds and Kettlewell started a vegetable garden. The seeds sprouted nicely, but we had no wire to protect them from the chickens, which scratched them all up and destroyed them.

Taking it all in all, the camp was most comfortable, and no one could reasonably complain of the arrangements made for our comfort. We had good tents with only two men in each, and each tent was provided with table and chairs as well as cots. All were lit with electric light. We fed in the big mess tent, where there was a plentiful supply of newspapers and magazines from home. We kept early hours, and by nine everyone was abed except the two unfortunates whose turn it was to fight clouds of hungry mosquitoes as they stood night guard duty, and those who took turns with the hydraulicer.

Sunday was, of course, a free day, and some of us explored the surrounding country, or took out their guns in the hope of getting game. I say hope, for game in this part of the world seems uncommonly scarce. Indians told us of jaguar, deer, bear, wild goats, to say nothing of skunks and racoons, yet I saw few of these animals in the neighbourhood of Sacambaya. Even birds were not plentiful, though there were a fair number of pigeons and parrots in the surrounding woods. There were also quantities of exquisite little humming-birds which flashed like living jewels from flower to flower. The humming made by the rapidly vibrating wings of these tiny creatures is surprisingly loud. Higher up in the mountains there were plenty of condors. Enormous birds these, some of them as much as fifteen feet between wing tips. All flesh is food to these gigantic vultures. As a rule they feed upon carrion like the rest of their tribe, but one hears stories of them swooping down upon mules travelling the passes and knocking them over into the ravines below. At times, so it is said, they will even attack men, and I was told that in such a case the safest thing is to lie down flat. The condor is coal-black in colour with a white head and a pale bar across its darkly spreading pinions. There is a curious ruff of feathers around its leathery neck.

If animal life was scanty, there were plenty of insects.

Too many. Mosquitoes were a real plague, and among them were the malaria-carrying variety (anopheles), easily distinguished by their spotted bodies. Sand flies, so small that they could fly through the interstices of a mosquito net, bit like fire. There were also midges, flying ants and hornets. The South American hornet is a dangerous insect and its sting is not only intensely painful, but the poison leaves one shaky and ill for hours afterwards. Tarantulas lurked among the rocks. No more repulsive looking creature was ever made than the tarantula, with its bloated hairy body, long legs and eyes raised on a sort of watch tower. They are as enormous as they are ugly. Scorpions were not uncommon, and one had to be careful in lifting the logs or stones under which they lurk. Their sting is painful but not dangerous to a healthy person. Of poisonous snakes we had vipers, coral snakes and rattlers. Several rattlesnakes were killed but none more than four feet long. The big rattler, the diamond back, is found only in low or swampy country.

Vampire bats were a much worse nuisance than any of these insects or reptiles; they attacked both horses and mules. They usually bite in the neck or in the spine, making a hole between the vertebræ and sucking the blood. Mules have sense enough to roll when attacked, but horses have not, so we were obliged to make tarpaulin covers, which were strapped on the animals at night. It seems strange that any animal should quietly submit to having a hole bitten in its hide and its blood sucked, but the general idea seems to be that the vampire injects some soporific which deadens the pain of the puncture. We had fishermen among the party but, as I have said before, there were no fish except minnows. It seems a pity that trout are not introduced. They might flourish in these cold mountain waters as they do in the rivers of Southern Chile.

Whilst on the subject of the natural history of Sacambaya, I may as well mention that there is a great scarcity of useful timber. The only tree which grows to any size in the valley is a species of ironwood, the wood of which is red in colour and so hard that it is impossible to drive a nail into it. Needless to say it was not easy to cut up, though

once it was cut it burned well. The rest of the vegetation was scrub, very thorny and covered with grey lichen and a species of orchid. The orchids, of a very common variety, were the most useful plant that grew in our neighbourhood for they formed fodder for our mules and fuel for our cooking fires.

Naturally, when the blasting started, most of the animals were driven away. Almost everywhere one finds ruins of ancient habitation. They ran high up the hills behind Plazuela and for a long way on either side of the Square Stone Heap. All the mountain sides show traces of having been terraced for cultivation just as one sees in the South of France. Of the Plazuela Monastery there are only a few walls left standing, yet it must originally have covered a very large area. A good deal of the ground on which it once stood has slipped down into the river, which is always cutting away its banks.

On San Juan's Day (June 24th and mid-winter in this Southern hemisphere) the Indians have the habit of setting fire to the scrub on the hill-tops. The custom seems allied to Beltane fires, which used to be lighted in May and always on the hill-tops in Ireland, Scotland and Cornwall. No doubt it is a relic of the old Sun Worship. This precious festival took a lot of Indians off the work and incidentally hung up our mail. For some time letters and papers had been very irregular, and on one occasion our runner returned from Inquisivi empty-handed. The postman, he told us, was lying drunk in the road. He had surrounded himself with a sort of *zareba* of stones which he hurled at anyone who approached. Sanders sent Mellows up, and he, arriving at the post office, was offered one small packet of letters by the postmistress. Feeling sure there was more, he instituted a search and found literally bags—nearly a mule load in all—lying about on the floor under tables and benches.

"Oh, yes," she said calmly when he tackled her, "I'm glad you have found it." It was no use making a fuss. Indeed, there was no one to whom complaint could be made. Mellows gave her ten Bolivianos with a promise of more if the letters were sent on promptly in the future. It worked. Such is the reward of inefficiency.

CHAPTER V

DIGGING AND DELVING

BY degrees the work on the Square Stone Heap got into full swing—compressors, drills and cranes at work, and the order of the day was drill, blast and clear away.

The rock is quartzite, supposed to be the second hardest stone known, so hard that working by hand with a striker it is a full day's work for a man to drill a single eighteen-inch hole. With our machinery we were able to do ten times as much, yet even so progress was slow, for owing to the lie of the strata many of the holes had to be drilled at awkward angles. Also the hillside was so nearly perpendicular that the workers seldom had decent footing, and often it was necessary to rope them to keep them in position. All the drilling work was done by ourselves, for it was impossible to trust drills in the hands of the Indians. As it was, we sometimes used as many as eighty drills in a day, which gave Shotton, our Ingersoll-Rand engineer, all he could do to make the supply cope with the demand. Drill sharpening is at best a tricky business. It is so difficult to get the right temper.

We tried the two hydraulic pumps for clearing away after blasting, and for washing away all the loose stones and earth, but soon found that the height diminished the pressure so greatly that the force of water was not strong enough to do the work. In order to remedy this, Shotton suggested that we should bring one engine up to the top and use the other for feeding. This cut us down to one hose only, but we did get a good deal more power.

Then a fresh difficulty confronted us. The pumping engine, which we had carried up the hill and planted above the cut, got in the way of the cranes, which had to swing their load over the heads of the hydraulicers. The great

chunks of rock lifted by the grabs or chain slings were never too secure and were liable to slip at any moment. There was only one way out. The hydraulicing had to be done by night, and four of us took it in turns, one to run the engine, the other three at the hose for a six-hour shift. A beastly job it was, for the nights were often cold, and one was always soaked, while even with the added power the flow was not sufficient, and in the morning there was usually a mass of sticky mud on the floor of the cut, which had to be shifted with shovels. To give light to the night shift Phillips fashioned two most ingenious acetylene lamps, each having ten burners. He made them out of old petrol and Quaker Oats tins. Phillips was a genius at making something out of nothing. An invaluable man with a show like ours. There was only one thing that upset him, that was to see tools abused or used for a wrong purpose. I am afraid that some of us noted this trait and traded on it. For instance, I wanted a circular electric light shade so I flattened a petrol tin, then called Phillips and explained what I was after.

"I suppose this would be about the right shape," I said, pointing it out with a chisel. It was a *wood* chisel, not one for cutting metal. As an asylum attendant would deal with a dangerous lunatic, so Phillips dealt with me. Gently he possessed himself of the chisel, then in spuriously calm tones addressed me.

"I think it would be better like this, old man," he suggested, "but if you'll leave it to me I'll see what can be done." That same evening he handed it over to me, a perfectly finished job, and I paid him his regular fee, one box of matches. Matches were often scarce in the camp and Phillips' pipe, which was in his mouth during almost all his waking hours, consumed several boxes a day.

Phillips' sleeping arrangements were a joy to the camp. His bed itself was just an ordinary camp bed such as we all used, but round it he had erected a sort of cage made of four-inch posts. Inside and over this were shelves on which he kept hammer, nails and other tools, as well as his clothes, an odd conglomeration. His mosquito net hung over the cage and the legs were wound with rags

soaked in creosote. The floor of his tent he covered with a mixture of clay and sawdust. This took a long time to dry, and while it was drying he used an elaborate arrangement of spring boards to reach his queer couch. We were never quite sure whether it was a bier, a palanquin or a bridal couch.

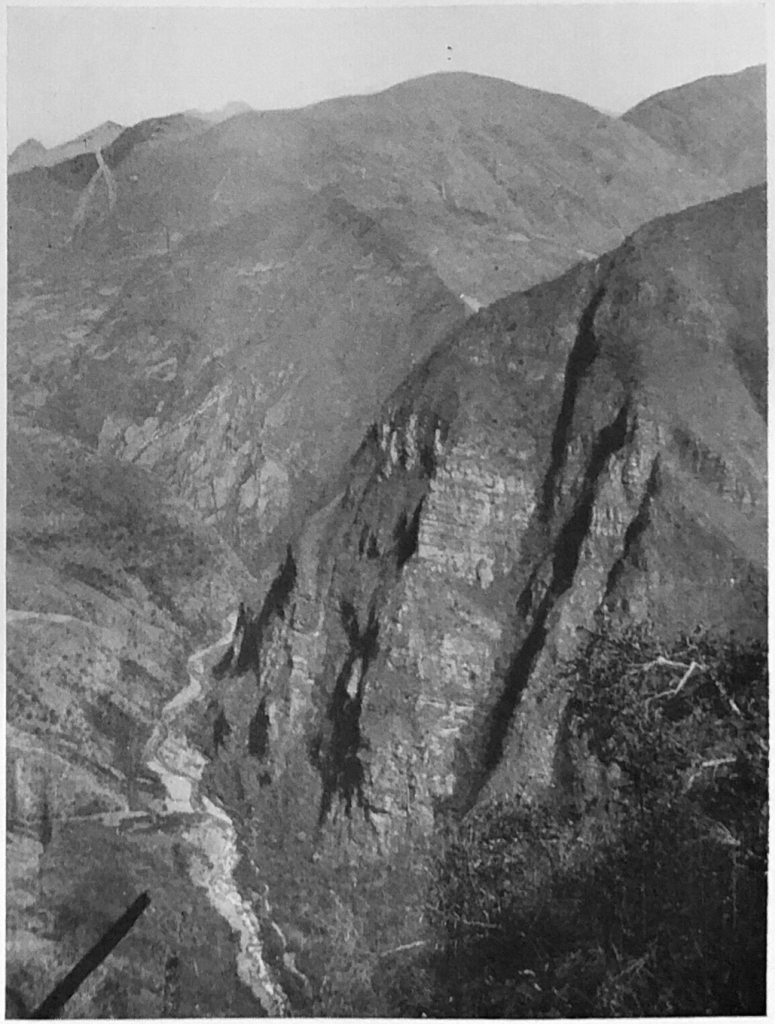
One night at bedtime I heard him shouting and ran in to find him in a very unhappy frame of mind. He told me he had seen two large tarantulas in the tent. One I found and managed to kill, but the other had vanished. I am afraid Phillips had a very poor night. On another evening, when he and I were sitting outside the tent smoking, Phillips relighted his pipe and threw the match away. Suddenly he gave a strangled cry and, grabbing my arm, pointed to the ground. Imagine my horror to see the match, still lighted, moving slowly away. Two trembling explorers seized torches to investigate the mystery, and found that the match had fallen on the back of an unfortunate toad.

Mosquitoes were bad at times and we all had to take our quinine ration regularly. The Indians, too, had their daily dose. You might think that these natives had become immune to fever after living for so many generations in malarious country, yet this is not the case. A joke which never lost its savour among the Indians was to induce a newly joined recruit to *chew* his quinine tablet and watch the faces he made. Oddly enough, all these Indians were inordinately fond of aspirin, which, in many forms, is advertised and sold all over South America, and they would fake up all sorts of excuses to get some from the doctor. A bad pain in the foot was the usual complaint. But our doctor was equal to the occasion and compounded tablets of such exceeding nastiness that even the Indians could not stomach them.

Unlike the South African natives who have some idea of treating wounds, these Indians were abominably careless about small cuts and wounds. Many of the thorns in the Sacambaya country are poisonous, and the punctures rapidly become septic unless disinfectants are used. One man came to the doctor with his hand in a terrible state. It was swollen to nearly three times its normal size, and



At work on the Square Stone Heap



The Sacambaya Valley

since the infection was spreading up the arm Mellows decided that an operation was necessary. We laid the man on the mess table and did our best to help. One administered the chloroform, others held the man's legs and arms. It took no less than forty minutes to get the patient under the anæsthetic. It may be that chloroform loses some of its potency at an altitude, or that the native is harder to anæsthetize than the white man. The operation progressed satisfactorily in spite of the bad light, and the doctor was grabbing arteries with his forceps when all of a sudden the man stopped breathing. Mellows dropped everything and started a vigorous course of artificial respiration, and after a nasty half-minute the man began to breathe again. While, of course, we were anxious to save the man's life from humane motives, we all knew that, if he died under the operation, the chances were strong that every Indian in our employ would desert. This man was back again at work within a fortnight.

We were fortunate all through in having no serious accidents though there were plenty of narrow escapes. One day a big boulder, dropping from the grabs of the crane, went bounding downhill right on top of an Indian. He looked very dead when we picked him up, but Mellows overhauled him and pronounced that no bones were broken. He was badly bruised, but after a few days' rest went back to work. If you can make a native believe that he is not much hurt he will get well. It is fright that kills them. Of our own party, Chadwick was the one who had the narrowest escape. He was working on the jib of the crane when it collapsed and he fell thirty feet into the pit below, accompanied by masses of stones and earth. Yet his only injury beyond bruises was a cut on one elbow.

So far we had been using only three compressors. When at last the fourth arrived on June 15th Hardman and Chadwick started work with it at the Tunnel, where the parchment and crucifix already described had been found by Sanders. They spent ten days in cutting out masses of thick clay, then to our bitter disappointment the tunnel ceased to be a tunnel any longer. We talked this over time and again but the only solution of the mystery we could

arrive at was that the tunnel was a blind lead. I mean that the Jesuits had cut the tunnel and placed in it the crucifix and parchment in the hope that any searchers would be induced to concentrate their efforts on this particular spot, which is half a mile from the site of the Square Stone Heap, and that the disappointment would cause them to abandon the search. It hardly seems possible that it could have been merely a practical joke.

Now that work on the main cut in the Square Stone Heap was well under way we decided to start excavations at the Fortress. Hilgarth was left in charge at the Stone Heap and I tackled the Fortress. Sanders thought there was a likelihood of finding a passage leading from the Fortress to the Treasure Chamber for, as he pertinently said, the Jesuits must have hoped to return at some future date and reclaim their gold, and they certainly could not have done this unless they had some means of access to it. Yet in the absence of any knowledge of the whereabouts of this passage my task was a most difficult one.

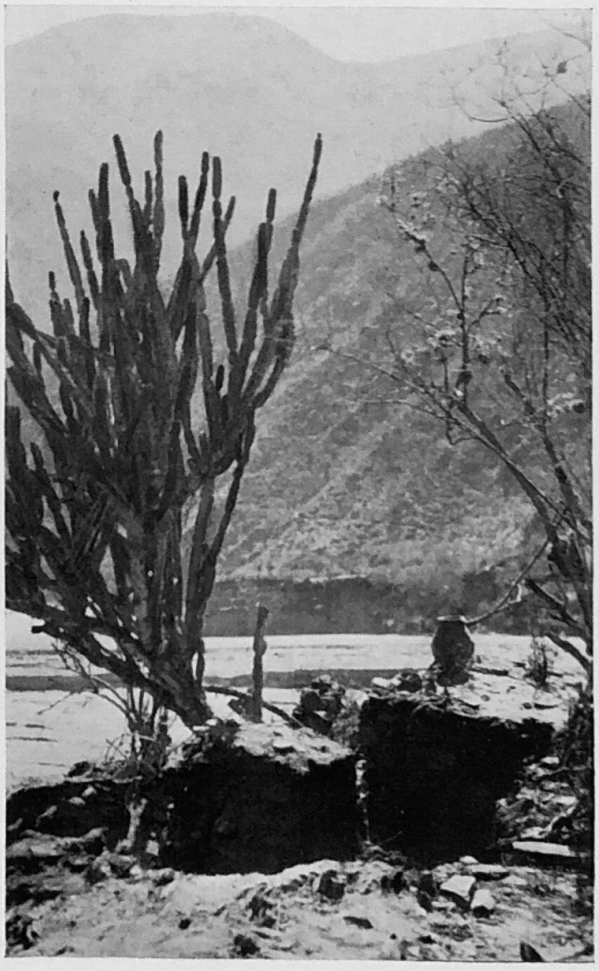
Hardman had already done some excavating in a search for the Iron Door mentioned in the San Roman manuscript, but without success, and Sanders had decided that it was not worth wasting time and energy on a further search for this spot. He never wavered in his belief that the real point of attack was the Square Stone Heap, and that this was our first consideration. For this belief he had good reasons, which I will detail here before I go on to the work done at the Fortress. They were :

1. The definite indications from the photographs.
2. Assurance by geologists that the Square Stone Heap was not a natural formation, but either a natural or an induced landslide.
3. That during our excavations we had already found masonry, bones and pottery buried under the boulders. It was also certain that, if we did find the Treasure Chamber, we should discover the passage leading to the Iron Door.

So far as we could gather, the Fortress was the oldest building in the neighbourhood. It certainly appeared to be



Walls of the fortress of Cuticutini showing the "archers' " steps to reach the parapet



Cuticutini Sacambaya

older than either the Plazuela Monastery or the Cuticutini Priory which lies further down the Sacambaya River. It seemed likely that it was the first settlement made by the Jesuits in this neighbourhood and that afterwards they built the Monastery on the opposite side of the river and, later, the Priory. The walls of the Monastery, such as remain, are thick and loop-holed, but there is very little of it left. A great part has collapsed into the river which, as I have said before, floods heavily and is always cutting away its banks. Indeed, there is now so little left that it is quite impossible to reconstruct its original plan.

I dug. For a whole month my Indians and myself worked hard. I found a quantity of pottery with llamas' heads and grotesque faces as handles; a large heap of charcoal in a fire-place; several silver and bronze pins and some charming little silver bells; crudely sculptured stone images of condors and of a pig-like animal, probably a tapir, in jasper; a carved stone dish, very smooth and beautifully cambered, probably used for gold washing; a wooden bodkin which had been hardened in the fire; a walled grave nine feet below the surface covered in with slate slabs and containing human bones, these so old that most of them had crumbled away; lastly, at a depth of twelve feet, and only three inches above bed-rock, some very perfect specimens of pre-Inca pottery, though why and how they came to be buried at such a depth is something of a mystery. In all, enough stuff to stock a shelf in a museum, yet nothing relating to my real search.

One thing for which no explanation could be found was a line of four compartments built of stone, five feet long, three feet wide and three feet high; a slate shelf was fixed in the corner of each which by the smoke-blackened stones above, had evidently held a light, at the back was a narrow opening leading into a recess of the same dimensions, also with slate shelves.

All were covered with a heavy slate roof.

There were many suggestions as to their use, such as quarters for slaves or prisoners, and, from the Padre at Inquisivi, that they might have been places where penances were performed—this last idea seemed feasible until I found

identical buildings at Cuticutini, only very much smaller, viz.—three feet by one foot six inches by two feet six inches high, so unless there was a race of dwarfs they could not have been used by human beings.

I found an outside staircase, and the foundations of many walls, but nothing to indicate the presence of a tunnel. One day Stead and I went over the edge of the cliff on ropes to see if there were indications of an opening in its rock face, but there were none. So after a month of hard work I decided that it was no use wasting any more time and returned to the Stone Heap.

It was at this time, the middle of June, we became aware that many of our letters had been tampered with—opened rather clumsily and closed again. We also heard from a sure source that a scheme which we had discussed in private for the removal of the Treasure (if we found it and if the Government demanded more than its fair and legal share) had become known to the Secret Police at La Paz. Now we were certain that we had no spy among us, so the only explanation was that someone had incautiously mentioned the idea in an outgoing letter which had been opened at La Paz. In order to prove whether our outgoing mail was being tampered with, Sanders wrote a letter under a fictitious signature, telling of eight depots of mustard gas in La Paz and of men ready there to use them when occasion arose. This letter, which was examined like the rest, caused trouble later.

On June 19th Sanders started for La Paz, partly to buy foodstuffs, partly to find out, if he could, what was really happening. In addition he had a list of commissions a yard long, from various members of the Expedition—watches to be mended, films developed, cigarettes and chocolates to buy. Owing, no doubt, to the lack of alcohol, most of us had acquired a craving for sweet-stuff.

As soon as Sanders arrived at La Paz he was closely questioned about the mustard gas, and though, of course, he laughed and denied the whole thing, the authorities did not believe him and had him shadowed. During his three days' stay in the capital two men followed him constantly. They were, however, not very clever detectives and Sanders

managed to avoid them. By dint of a little judicious bribery he discovered that every single one of our letters had been opened and that a typed copy of each was in the hands of the authorities. He also found out which of us it was who had been incautious enough to mention the secret in his letter home, and the result of this was that on his return a censorship of letters was established and lasted during the rest of our stay at Sacambaya. Incidentally, Sanders must have been greatly amused, when he read the letters at La Paz, at the candid opinions of himself and others expressed in some of them.

During one of my spells of censorship I read, " the orchids grow on the lichen-covered trees and bark ! "

Before leaving La Paz Sanders succeeded in posting a number of letters in the box on the outgoing train, and these at least he felt sure would not be opened.

It is only fair to say that at this time Bolivia was under martial law owing to the quarrel with Paraguay, over the Chaco, and so the Government had a right to open letters, yet the episode made us nervous, for we feared that they were prepared to play us a dirty trick and refuse to stick to their law of 1925, which expressly stated that a duty of only two per cent shall be claimed on gold exported from Bolivia. Also, we were well aware that we were not popular with the Ministry on religious grounds. Altogether we were distinctly uneasy.

About this time an American journal published in Buenos Aires reached us, which contained an article devoted to our expedition and its work. The writer, who seemed to know what he was talking about, gave his opinion that we had good prospects of finding the treasure, but rather doubted whether we should be able to get away with it. He hinted that there were many wolves waiting to pounce on us when we found it. The article ended with this queer sentence :

" There are many trees for angry men to hide behind."

What with the " dolorous death " promised by the parchment, and the cheery prophecy that " the bones of nine of us should pay tribute to the earth," we had something to think about. Not too pleasant thoughts, either.

While I am talking of the " dolorous death," I might

mention that when we were in La Paz we were warned by one of the English officials that a Bolivian named Herrada, who had murdered an Australian some time previously, was at present in Inquisivi.

This man had escaped on no fewer than three previous occasions, and we were told that one, Hernando Jiminez, a notorious bandit, said to have been guilty of thirty-seven murders, including that of his own son, had made his headquarters at Inquisivi with the probable intention of effecting Herrada's escape. A warrant had been issued for Jiminez's arrest and the police were after him. The police, however, were so terrified of the man that it was not in the least likely they would search for him seriously, but at the same time, so our informant told us, a new sub-Prefect had been elected who was supposed to be more honest than his predecessor and to be very much in earnest, so far as Jiminez was concerned. Jiminez and his gang were presumed to be on the look-out for the expedition.

Bolivia is indeed a queer country. A little more than a month later we learned that Jiminez was living openly in Inquisivi, and not only that, but had been appointed Honorary Chief of Police, while the " honest " sub-Prefect had been compelled to make a hurried exit.

We cheered the Doctor by telling him that Jiminez had been so flattered by the account of himself that the Doctor had sent up to the *Star* that he was certain to receive official recognition as Jiminez's thirty-eighth victim !

CHAPTER VI

THE HIDDEN PARCHMENT

IN July the tunnel came to a dead end. It was quite clear that we had struck virgin rock. That was a shock to all of us and caused a wave of pessimism to come over the camp. Some of the members of the expedition talked of quitting in September and forfeiting their shares if nothing were found in the meantime.

It is one thing to hear of a treasure hunt and make mental pictures of the delights of finding great stores of gold and the joys that the proceeds will bring; but no one ever imagines the drudgery, the hard work and the intense monotony of the search. We had had our noses to the grindstone ever since arriving at Eucalyptus; even our "Sundays out" did not start until we were settled at Pongo.

Those Sundays passed like lightning. By the time one had climbed out of bed—a little later, it is true, than on weekdays—given the tent its weekly turn-out, written a few letters, oiled guns and boots, done some very necessary mending or, by way of a change, gone out for an hour or two with a gun, Sunday was over and we had been just as busy as on any weekday. It would have done us all a power of good if we could have got away for an occasional week-end, but, alas! there was nowhere to go except to Senor Urey's, which was three hours' ride away. But there only Spanish was spoken, which naturally made the visit an ordeal to those who were not expert in the language.

While, as I have said, some of us were discouraged, even the most pessimistic agreed that we had not gone deep enough or far enough into the Square Stone Heap to fully prove the indications given us by the scientist. It must be remembered that it had been impossible for him to indicate the exact spot where the treasure was hidden, since he had

only horizontal photographs instead of vertical to work from.

There had been delay in taking fresh photographs to send back to England. The difficulty was that the photographic kite which we had brought out especially for this purpose, would not function properly in the valley. Though breezes sprung up nearly every afternoon, they were usually puffy and gusty, and in the afternoon the light was wrong. Manœuvring the kite over the thick trees was a chancy business and we dared not risk our very expensive camera unless the wind was steady.

Many efforts were made to overcome this difficulty and this was at last accomplished by stretching the kite line from a tree standing high up on the Square Stone Heap to another in Plazuela Monastery and drawing the camera along it to the required spot. Then we invented a contraption like a toy aeroplane which we called a " consul." This released the shutter fifteen seconds after it had struck the camera, to diminish vibration. By this means photographs were successfully taken, but we were not able to send them to England via La Paz until August 2nd, which meant we could not receive a cable reply before the middle of September.

Personally, I should have liked to have sent photographs of Plazuela Monastery, Cuticutini Priory and of the Negro Muerto, as well as of the Square Stone Heap. There was always the chance that the treasure might have been buried in any of these three places. Treasure hunting seems to be rather like religion in that outward and visible signs certainly help to keep faith alive. A reassuring cable would have been useful in this time of despondency.

Nearly all the former seekers for the Sacambaya treasure had started work on the top of the Cavallo Cunca. C. H. Prodgers, who wrote *Adventures in Bolivia*, a man who was at one time with Prodgers, and Sanders himself at first worked on top of the hill under, or near, the great Egg-Shaped Stone, which originally crowned the hill. This stone was an enormous mass of rock fifteen feet high and fourteen in diameter. Prodgers blew it to pieces with dynamite, then after excavating to some depth, thought

that he had discovered the roof of a chamber covered with large slabs of solid rock. Digging downwards, he and his men came upon bones of birds and guinea pigs, pebbles from the beach below and at a depth of twelve feet, a yellow altar slab engraved with flowers. Later he found an opening between two rocks through which he pushed a long bamboo for a distance of twelve feet. Evil-smelling gas poured from the opening and he had to scramble out in a hurry. Prodgers continued his explorations for some years, but he never had more than two or three Indians to help him and, naturally, was unable to do very much in the way of excavation. He died before he could complete his work.

In the year 1921 the man (Smith), who had been associated with Prodgers for some time, started working on his own account and continued until December, 1927, at intervals, when he could raise sufficient money. He drove a fifty-foot tunnel into the eastern side of the hill with several galleries branching off it, and struck an old Jesuit mine shaft, in the entrance of which he discovered a porcelain vase. This shaft was choked with fallen rock, while the entrance was too narrow to pass through. In order to enlarge the entrance he put in a charge of dynamite, but this was a mistake. After the blast there was a terrible rumbling which continued for no less than an hour and a half and was caused by masses of rocks and stones tumbling down into the depths beneath. This meant weeks of weary work and hauling up the rubble by means of a cowhide bucket.

He had the quality of perseverance. Nothing daunted by his previous misfortunes, he started a new tunnel further down the hillside, hoping by this means to connect up with the old shaft. This lower tunnel and the galleries which he cut singlehanded, are more than a hundred yards in length, but he did not succeed in connecting with the shaft. He showed amazing perseverance and tenacity, and on one occasion lived on the spot for eleven consecutive months, sleeping each night in the tunnel so that no one should be able to trespass on his domain. It is said that he was induced to work and to remain working at the same spot on the advice of a Hindu Yogi.

We had heard many tales of this fellow before we left England, among others, that he had threatened to shoot Sanders on sight, or anyone else who tried to interfere with his search for the Sacambaya treasure. As a matter of fact, he had no rights at all. Our Company held all the treasure and mining rights for this property, as well as those for the Plazuela Monastery—which belongs to a different owner, so we were rather surprised when he came to see Sanders at La Paz and had a long interview at which several other members of the expedition were present. He was, I think, quite willing to join the expedition, had it been suggested, and to put all his knowledge, whatever that may have meant, at our disposal. He told Sanders that the Bolivian Government had commandeered the rifles and stores which he—Sanders—had left at Palca after his last expedition, but this proved to be quite wrong. Nothing of the sort had happened. He also offered to get Indian labour for us and strongly advised our shooting all the labourers out of hand if we were successful in finding the treasure.

Sanders and I decided that, while waiting for a cable about the photographs, it would be well to explore the top of the hill and the workings, so on July 9th I went up with Hilgarth and Chadwick to investigate these tunnels and make up our minds whether it would be worth while to explore them further. We were fortunate in having an Indian foreman, Simon, with us, who had worked with Prodgers' associate. Incidentally, it was from him that I got most of the story.

Points to be settled were :

(1) Assuming that the shaft had originally been a mine, had it been tin, copper, gold or platinum ?
(2) If the mine had been worked out, had the Jesuits used some of the shafts and tunnels and added to them so as to make the tunnel " two hundred cordas long " to the treasure chamber ?

There were no indications of more than one entrance, so it seemed clear that the others must, for some reason, have been carefully concealed. This looked as if the shaft had something to do with the treasure.

The rock through which the tunnels were cut was shale with veins of quartz. Since we had no geologist with the party, samples were sent away for analysis, but unfortunately, we never received any report. Sanders and I agreed that the mine should be looked over and I started work there on July 11th. The mine was close to the spot where the Egg-Shaped Stone had stood and was quite nine hundred feet above river level. It was a very stiff climb up winding paths covered with loose shale. Brush had grown up and blocked these paths, so one of our Indians went in front, clearing the way with his machete. Others of our men packed wheelbarrows, picks, hammers, etc., on their backs, each carrying a load of about seventy-five pounds. Their food for the midday meal was sent up by runner from the camp. I took sandwiches each morning and stayed up for the whole day.

I found that Smith had walled up and filled in the entrance to his tunnel. After clearing this and some tons of debris that had fallen from the roofs of some upper shafts, I came across a network of galleries, but all these, on exploration, came to a dead end. Clearly, they were prospecting shafts made by the Jesuits looking for the vein of ore. It was dangerous work, as one never knew when an avalanche of loose stones might crash down from the roof. Once Simon got buried under a fall and it took two hours to get him out. Most fortunately he was unhurt. Days were spent in clearing up and making a rough plan of the workings. I found one of the concealed entrances by making a green-wood fire in the old Jesuit shaft and watching the hill-top to see where the smoke came out. But for a long time I was at a loss to know where next to start working.

One day, when in the tunnel, I noticed that the floor sounded hollow under my feet and taking up some cunningly laid stones, found a shaft which had been properly timbered. By the newness of the wood and the fact that the props were nailed together, I knew that this was some of Smith's work. It came to me that what he had really tried to conceal was not the shafts leading upwards, but this one leading down, and I confess that I was a good deal excited. Next day I got a fresh force of Indians and began clearing

it out, but this was slow work, for there was only room for two men in the shaft and all the rock and rubble had to be hauled up in a cowhide bucket by man-power. The shaft was about four feet square. We went down foot by foot, and at a depth of thirty feet found that it branched into a tunnel running at right-angles. The whole hill was honeycombed with natural rifts and clefts and I found it most difficult to say which was natural, which made by the Jesuits and which by Smith. This tunnel, I assumed to be an old shaft which Smith had discovered, and I went on cheerily clearing it out, only to get a horrid shock when, after fifteen feet, it suddenly ended in solid rock. The last spadeful uncovered a small crowbar! This proved conclusively that the shaft was Smith's work and not the shaft for which I was searching.

It was a fascinating eyrie, high up there on the hill-top, and there were marvellous views over the ranges and valleys. Above all, one had a most pleasant respite from that depressing feeling of being shut in which we all experienced in the valley below. I got Sanders to come up and inspect the results of my work, but we agreed that it was too speculative to carry on with.

Hilgarth had to go to La Paz on business for a few days, so it was decided that I should take over the work on the Square Stone Heap during his absence, and when he returned, that I was to look into other matters contained in our concession. The cut we had made in the Square Stone Heap was forty feet in width. There were huge boulders overhanging the three sides and there was a deal of dynamiting to be done. After some days' work I came to the shale bed-rock, and suggested to Sanders that we should try tunnelling. Sanders, however, did not agree. He argued that we had time, money and labour and that by tunnelling we might miss the chamber. To make doubly sure, he decreed that the great cut should be deepened by six feet.

Our drill-sharpener had broken down again. It was an experimental one which we had foolishly brought out chiefly on the score of economy, so on the advice of a German geologist we tried the old method of cracking the rocks by heat and water, that is to say, we lit great fires of wood and

when the rocks were nearly red-hot turned the hose upon them. This method was slow, but quite successful, and tided us over the time while the drill-sharpener was being repaired. At the same time it was not economical in labour or otherwise since it took fifty Indians half a day to collect sufficient wood to heat the enormous rocks, without counting the cost of the petrol for the engines to pump the water.

Hilgarth was away about a fortnight. When he came back and took over I went up to Señor Urey's ranch, which we could see from Sacambaya, perched nearly four thousand feet above us in the mountains. On his ranch were large forests of pine, cedar, yellow and black laurel, and the idea was to see whether this could be turned into a paying proposition. Señor Urey told me that pine lumber sold in Oruro showed him a profit of one hundred Bolivianos, this is about £8 per ton, and that there was a proportionately larger profit with the more expensive woods such as the cedars and black laurel. This profit was made even by the primitive methods he was using, and taking into account the fact that all the timber had to be sawn into lengths and transported into Oruro on mule back.

It seemed to me a capital proposition for anyone who had a few hundred pounds with which to instal power-saws and who was prepared to work and oversee himself, but the snag was the utter lack of roads and means of transport. This is the trouble not only in Bolivia, but all through South America. The natural wealth of the country goes to waste simply because there are no roads and very few railways. Quite apart from its minerals, Bolivia has forests containing some of the most valuable timbers in the world. I must admit that roads would be costly to construct in Bolivia owing to the intensely mountainous nature of the country, yet it must be remembered that the Incas built splendid roads centuries ago, although they had neither dynamite nor steel tools.

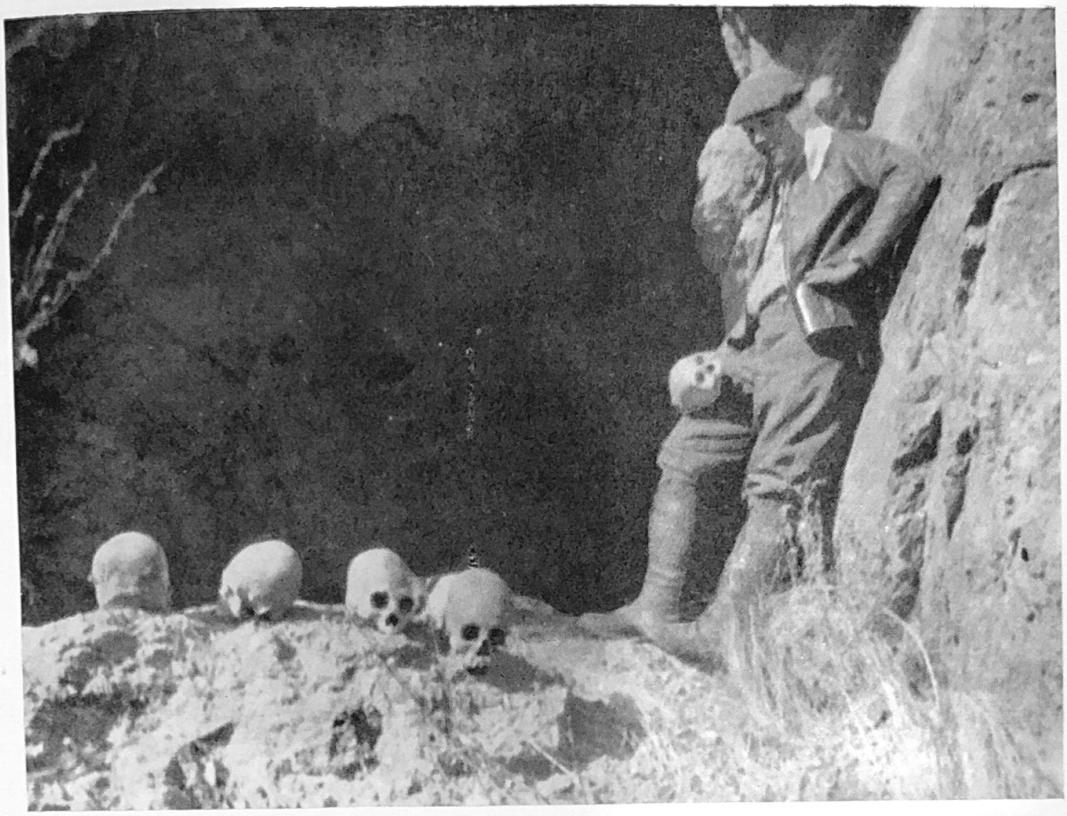
Urey told me that he found labour very difficult to obtain and that in spite of the fact that he had offered to give each of his Indians as much land as he could cultivate and lend them all tools and implements until their first harvest was garnered, provided the Indian would work for him

eight days of eight hours during each month. Urey had an excellent reputation as a "patron," but his ranch was too far from the nearest Indian village. What an excellent chance there would be here for those starving in city slums!

Urey was a progressive man and in addition to his farming business had started an alcohol factory. This is one of the most paying industries in Bolivia, and he told me that the six thousand Bolivianos with which he had commenced this business in 1926 were now worth 160,000 Bolivianos. The spirit which he turned out was tremendously strong, only four degrees under proof, and found a ready sale among the native population.

I went back to Sacambaya and reported to Sanders, and a few days later he and I made an expedition to the Skeleton Cave at Machacamarca. This cave lies on a height of thirteen thousand feet and is three hours' ride from Sacambaya up a steep trail the whole way. Lichen coated the stunted trees until a point a few hundred feet below the top of the mountain, then the trees ceased and a short, coarse grass covered the surface of the ground. Here we put up a few partridges, but having no guns could not shoot any. The scenery was marvellous, range after range of rolling mountains rising to tremendous snow-clad peaks.

The cave itself is a narrow cleft in the hillside no more than ten feet wide at the opening and narrowing sharply. A ledge inside was piled with human skulls and bones. Nearly three hundred Indians had been buried there. One story was that they were victims of an epidemic, but according to another report they were those Indians who had helped to hide the treasure at Sacambaya and had afterwards been done away with. This latter story had been rife in the country-side for years before the cave had been discovered by the children of Señor Rueda, the owner of the land. The heavy rains had washed away the earth at the top of the cleft, the children found the opening and peered in to be shocked by the great heap of whitened bones. Then their father had widened the hole and gone in. He told Sanders that he had found an old wooden chest filled with parchments, but what these papers related to we never knew, for, although Sanders did his best to induce Rueda to



The entrance to the Skeleton Cave



A day's find at Cuticutini

show them, the man flatly refused to do anything of the sort.

During his previous expedition to Sacambaya Sanders had taken a party of Indians to this cave and done some digging at the inner end. Eight feet down and twelve feet in the men came to a narrow opening, disclosing a shaft. A candle let down on a string showed that this shaft was about thirty feet in depth, and half-way down there appeared to be another shaft leading off at right-angles. Not having the necessary ropes it was impossible to explore the shaft, but Sanders brought home specimens of the rock. These he took to an English geologist, Orlando Brown, who tested them and found that they contained a considerable proportion of silver. Unfortunately Sanders had a sharp attack of malaria at the time, so was unable to return and explore the old mine.

Meantime the price of silver has diminished so greatly that it is more than doubtful whether it would pay to work the Skeleton Mine. What adds to the difficulties is the fact that the place is more than three miles from the nearest water and about two from any firewood.

On our way back Sanders and I discussed the advisability of starting work on the Skeleton Mine by dynamiting the entrance so as to get access to the shaft, or whether it would be better to try some digging at the Priory of Cuticutini. I was all for the latter proposition, which appealed to me as interesting and more likely to be profitable. At this time of year it would be bitterly cold at the great height where the Skeleton Cave lay, while the absence of wood and water would make our task there a very difficult one. We decided not to start operations at the Skeleton Cave until a later date.

CHAPTER VII

THE SACKING OF SIMON

THE Priory of Cuticutini, which was a fort as well as a priory, lies on a promontory at the junction of the two rivers Khato and Cuti, about two miles below our camp. Both these rivers flood heavily during the rainy season, with the result that in the course of years much of the tongue of land on which the Priory stood has been washed away. What still remains is an area roughly three hundred and fifty yards long by one hundred yards wide. On the land side it is guarded by a strongly built wall fifteen feet high and six feet thick. There is a gallery above and slate steps are set in the wall leading up to this gallery in order to enable the defenders to shoot through loopholes. Twenty yards inside the outer wall is another wall of similar dimensions which constitutes a second line of defence. The whole ground behind is covered with ruins, but when we first examined the spot the undergrowth was so thick that it was most difficult to get any idea of the general plan of the Priory or its surroundings.

Outside the walls of which I have spoken were large flat spaces which no doubt had originally been gardens; also many ruins, probably those of grain store-houses. Round the outer wall is a moat or ditch ten feet deep, but this must always have been dry, since the Priory itself stood fully seventy feet above the modern river-bed, and this bed has filled up considerably in the course of years. Across the river, on the opposite point, are the ruins of another building of similar type, but little of this remains owing to the under-cutting of the bank by the early floods.

Our friend, Señor Urey, told us that, when he was a boy, there were still remains of a church to be seen and that under the altar gold relics had been found, but said also that an Indian, named Rodriguez, came every year to Cuti-

cutini, after the rains had ceased, to search in the debris washed down into the river-bed. In this way he found enough gold each year to keep him until the next rains. This information decided us to use the small Gwynne hydraulic engine for the purpose of washing away the edges of the cliff. This was loose, gravelly soil with few or no boulders in it.

The problem before us was how to convey the engine to the spot. It weighed eight hundred pounds and, owing to the way in which the river curved, it was necessary to convey it across two fords, each about six to twelve feet deep. After considering the matter we constructed a raft made of tree trunks lashed together, with floats consisting of a number of empty petrol tins with their openings soldered up. The engine was on two wheels and ten Indians dragged it to the first ford, while sixteen other Indians carried, or floated where possible, the raft down to meet it.

I had stretched a strong rope across the ford, and by fixing pulley-blocks from the rope to the raft and using the stream as motive power, the first crossing was accomplished quite successfully. The next operation was to haul the engine through the small forest of willows to the second ford, a distance of some five hundred yards. Meantime the raft was floated down to meet it. Then the engine was again embarked on the raft.

This ford was wider than the first, being at least one hundred yards in breadth, and I had not enough rope to stretch across it. In the centre of the ford was a shallow patch with nasty sticky mud beneath it. It was plain that the laden raft could not pass this, so Beart and I armed ourselves with long willow punt-poles and, with the Indians wading and holding guide ropes attached to the raft, we sailed off with the idea of making a detour to avoid the mud bank.

We launched in perfect style, the raft sat trimly in the water and everything was securely lashed. Twelve minutes later we ran upon a shoal. I shouted to the Indians to push us off and they, too willing, flung their weight on the raft. Then came disaster. Behind the shoal was deep water, and the Indians, finding themselves suddenly over their heads,

clung to the back of the raft. This upset the balance of our clumsy craft and the whole thing tilted slowly backwards. The engine was torn from its lashings, and although we managed to fasten ropes to it before it disappeared, it settled down into thick mud. The raft, meantime, drifted down river to the rapids, from which it was subsequently salved.

The rest of the day was spent in the water, waist deep, struggling in the sticky mud, and to add to our discomfort came a violent thunderstorm which lashed our naked bodies with icy-cold water. All efforts to move the machine proved unavailing; it was afterwards found that one of the wheels had been broken off. In my struggles I tore a ligament in my knee and was laid up for a week. Yet the cloud has its silver lining, for I missed the extremely unpleasant job of salvage.

The next day the engine was successfully hauled out on the far side by means of block and tackle; then Beart and Barclay took the engine down and thoroughly cleaned it out; the magneto was brought back to the workshop and there tried out. It did not seem to have suffered any damage, so was put back, but when an effort was made to start the engine nothing happened. For two days they turned hard and used vile language, but never could the infernal machine be made to function for more than fifteen seconds. Investigations made later showed that the magneto had a loose wire.

Since we were most anxious to get to work on the Priory without more delay, we put half a dozen Indians to work on clearing the undergrowth and cutting six-foot cuts across the promontory to the edge of the cliff. We found the buildings to be all of one type, long, narrow rooms or dormitories, one on each side of the square, leaving a compound in the centre. These rooms were forty feet long, but no more than six feet wide. We found the ruins of at least twelve of these squares. Adjoining each of these long rooms was one of the curious little buildings resembling dog-kennels, similar to those which I had seen at the fortress. Their purpose remains a mystery. I found no trace of any other building such as a church or the quarters of the Jesuits themselves. It seems probable that these had stood on the large area of ground which the floods had washed

away. The size and number of the dormitories—there were over fifty of them—pointed to their having been occupied by the Indian converts or workers, for it is impossible that there could have been so many of the Jesuits.

I did a very thorough job of digging, under the floors of the rooms, outside them in the compounds and in the open spaces. In nearly every spot I found *tapadas*. These were of various sizes. They were covered with thick slate slabs and the sides lined with the same material. In most of these holes we found two small earthenware pots, one of which had been filled with grain, while the other had presumably held water, provision for the dead on their journey to the next world. In some of the holes were larger pots containing bird and animal bones and a very few held human bones wrapped in pieces of coarse material resembling sacking. I found a number of silver and copper pins, a milling stone, a copper nail and some bronze axe-heads. The pottery was a fair quality, though greatly inferior to that found at the Fortress.

Two predominant designs appeared on the pottery, one an animal shaped like an elongated cat, no doubt representing a jaguar, the other the sign of the swastika. In Inca times the condor was the emblem of the sun, or day-time, while the puma or jaguar represented the moon or night. The swastika is supposed to have originated in China and it would be interesting to trace the course of its journey to South America, to say nothing of its adoption by Adolf Hitler. Of gold ornaments we found no trace at all and I suspect Señor Rodriguez must have made but a poor living unless, indeed, he gained his wealth each year by some nefarious means which he explained by the story of his annual visits to Cuticutini.

Early in September rain began to fall heavily, and the whole breadth of the river-bed became a sheet of yellow, swirling waters, which ran with such force that even if we had had a boat we could not have used it. Now the only way to reach the Priory was by mule path over the mountain, a journey which took fully an hour and a half, so as nothing important had been found it was decided that I should make a start for Monte Sapo. Here was a reputed gold mine of

which Herr Block, a German geologist whom we had sent out, had given a glowing report, a report which assays had confirmed.

I will not inflict the whole of this report upon my readers, yet some extracts are sufficiently interesting for insertion :

"ORURO,"
"*August 27th*, 1928."

"During the days of the 11th to the 15th of the present month I studied, on your instructions, the legendary mines in the region above indicated, from where the Jesuits have obtained prodigious riches in gold recorded in the history of Bolivia. I say 'legendary' because after a century and a half they have been completely forgotten. The reason for this is that in the first place the Jesuits covered up all the entrances to the veins, and even removed the dumpings of the mines, and, besides, they instilled a great fear into the natives, threatening them with divine vengeance. Another reason why these mines have been forgotten is that at the beginning of the nineteenth century it was more advantageous to work silver, and at the end of the same century its place was taken by tin."

"And, indeed, my excursion confirmed such ideas, as the mines could not have been better guarded, even completely blocked by Nature. In order to reach this spot it was necessary to cut trails through the virgin forest, as the roads built by the Jesuits had completely disappeared, and the entrances to the veins were covered up artificially, and Nature had also helped to do so by its exuberant vegetation, the place was so well hidden that only the experienced eye of the miner could decipher the indications."

"*The Journey.* Leaving the Valley of the Sacambaya, situated at an altitude of 1,700 metres, I reached the mine by way of Cuticutini, ascending to Silaplata ; from there, turning round the corpulent massif of Tres Tetillas, I reached the village of Tultuani, situated at an altitude of 2,500 metres. This spot is known in Bolivia as a 'Head of a Valley,' which indicates that the climate is good, healthy, and that there is always sufficient agriculture. The population produces maize, grain, and all kinds of vegetables. The

distance from Sacambaya to Tultuani, by roundabout ways is some forty kilometres."

"*Geology*. The massif of Tres Tetillas is formed by an upheaval of considerable height, of more or less 4,700 metres above the level of the sea. The bulk is composed of slate, of Devonian formation, the base containing great masses of eruptive rock of basic composition, such as diorite, porphyrite and diabase. This is clearly shown on the surface where crops and veins of the same rock are found."

"The slate strata is profusely cut by out-crops and in almost all places where these are found there are veins of metal."

"Almost all of these show an inclination of seventy degrees and the general direction is from North to South. There seems to be a general agglomeration of veins on the North-east slope of the mountain. There I encountered an outcrop of very basic rock, some three hundred metres wide, and it is in this mass that I found the most important veins, which were worked by the Jesuits with great care. I could penetrate into two of these veins for a distance of two hundred metres, one of these being twelve metres wide and seeming to continue throughout at the same width."

"The minerals of which these veins are composed are as follows :

1. *Gold Veins*
   Sodalite
   Limonite
   Quartz
   Siderite
   Pyrites
   Silver ores
   Gold."

2. *Silver Veins*
   Siderite
   Barium sulphate
   Quartz
   Silver galena
   Pyrites
   Silver ores."

"I have taken a sample on the total width of the above-mentioned vein of twelve metres, which was assayed by Dr. Billig at Oruro, and showed the following:

"Gold. 2·5 grammes per ton. Silver. 42 grammes per ton. The samples which were taken from the silver veins on assay were shown to contain great quantities of silver and lead. One of the samples contained 120 Marks, i.e. 1·2 per cent of silver. This sample was not tested for gold."

"Another vein, composed of Limonite only (Iron Hat) showed the following assay:

"Gold. 0·1 grammes per ton. Silver. 43 grammes per ton. Apparently the minerals do not assay very highly, but considering that it was only a short inspection, undertaken for the purpose of determining whether the mines abandoned by the Jesuits existed at all or not, and considering also that the samples were taken on a considerable width of twelve metres, I consider that the results obtained are favourable and that rich veins certainly exist in the basic rock as described above. I have not the slightest doubt that a new inspection and sampling, after having cleaned the place a little, will produce most pleasant surprises."

"I could not say anything at present on the available quantities and the average contents, but I think that these quantities are very great and the extraction of gold and silver from the veins will be a very good commercial proposition."

"*Alluvials*. Another result of my exploration was the discovery of alluvial deposits. I have already mentioned that originally the mountains were considerably higher, and that in pre-glacial times they must have been over five thousand metres high. We know that in diluvial times there was an invasion of ice and glaciers which came down to a level as low as 2,300 metres above sea-level. As a result of these glacial erosions in this spot we find enormous glacial moraines which are very well preserved between the altitudes of 2,300 and 3,000 metres."

"The quantities are very great, many millions of tons. I have taken samples in various parts of the alluvial deposits, making up an average sample, which assayed:

"Gold. 1 gramme per ton, which is to say, 2·2 grammes per cubic yard."

"I could not say that this would be the definite assay of these mounds, as due to the magnitude of the object it is necessary to take very many samples. Beside gold the samples show forty grammes per ton silver."

"If this assay on metallic contents should be confirmed, this would be a great industrial proposition, because it would be very easy to instal a hydraulic system. There is plenty of water available, and by uniting the three creeks of Tultuani, Cupini and Corimayo there would be 1,500 litres of water per second available, that is in the dry season. Besides, it would be possible to build reservoirs at the necessary height."

"Summing up, I can state that in Tres Tetillas I have found gold and silver deposits of large dimensions entirely unknown, industrially as well as geologically. The Jesuits undoubtedly knew of its importance, but they were expelled. Given the importance of this region, I recommend a thorough exploration of the ground, to be executed with the necessary exactness."

"(Signed) HANS BLOCK."

Sanders went off to Oruro to put in the Monte Sapo mining claim, while Hardman and Chadwick, who were to accompany me, got tents and equipment together. Then we awaited the arrival of Herr Ahlfeld, another German geologist, who was to continue Block's work. Block himself had been called away. It was just at this time we made the unpleasant discovery that our trusted foreman, Simon, a very intelligent and excellent workman, was in correspondence with Smith. It will be remembered that Simon had been associated with Smith in the latter's digging on the upper part of the Square Stone Heap. Smith, it appeared, was demanding information as to what arms we had and what precautions we had taken for guarding the camp. He also wanted to know if there was any discontent among our numbers and suggested to Simon to meet him secretly at a spot in the woods about half a mile above the camp. Smith, as we knew, was a ruthless sort of person and rumour said that he had held up two mine pay-rolls and shot at three

people in the process. Whilst I was clearing out the tunnels which he had made I often used to wonder what he would have done had he come and found me on his pet preserves. Just in front of the tunnel mouth were suspended from a tree by wires some old tins which he had used as targets and their appearance verified the rumour that he was a dead shot.

This discovery did not add to our happiness. It seemed beyond doubt that there was a sinister motive underlying Smith's enquiries. Having intercepted his letters, we naturally did the same with Simon's replies. Simon gave his former employer all the information asked for, but said that he was unable to get away at night as the camp was too closely guarded, and he would run considerable risk of being shot, which I am sure was very true.

A couple of weeks after making this unpleasant discovery, Simon, who was being closely watched, and five other Indians were caught having an orgy on *chicha*, a very potent form of home brew. We had him up and in his maudlin condition the man made a full confession, stating that Smith had written to him, but flatly denying that he had written any replies. When confronted with his own letter he still persisted in his denial and actually he was right, for, not being able to write himself, he had dictated it to one of the men who could. He was put under close arrest and later taken off to Palca where, it was rumoured, he was wanted for quite another crime. Sanders arranged that, for payment of thirty Bolivianos a month, the man would be kept in prison as long as we required. In order to make quite sure that Simon would not be released the sub-Prefect received a little present of one hundred Bolivianos, but one week later we learnt that the sub-Prefect had been replaced and that Simon was at large again. The charge against Simon, officially, was theft, since he had stolen meat, rope, fuse, detonators and other things which were found in his house when it was searched, but our real reason for wishing to keep him under lock and key was that he was a noted marksman who might try to snipe some of us, while in the event of the treasure being found it seemed likely that he might join forces with Smith and hold us up.

At the time I thought he was being treated rather harshly, since, after all, he was Smith's man originally, who had paid him to keep an eye on his tools and, incidentally, to keep him informed of our doings. So it seemed to me that, when the unfortunate Simon worked for us and found himself decently used and grew to like us, he was between the devil and the deep sea. Later, when I was at Monte Sapo I had reason to revise my judgment, for I heard that he had picked a quarrel with one of our ex-employees and had a savage fight with the man. Anyway, he had an eye gouged out in the struggle, which, I hope, taught him a salutary lesson.

The weather now was cooler and mosquitoes and sand-flies were not so bad as they had been when we first arrived at Sacambaya, but we had a new plague in the shape of fleas. One day Sanders told me that he had heard of a flea " devil-doctor " from Aguilar,—the owner of the land on which we were working—and that Aguilar vouched for this man's powers. We sent for him and he came, a quiet old Indian wearing a blue shirt.

" Yes," he said, " I can free your tents from fleas, but you must leave me in peace and not jeer at me." We readily promised this and watched. The old man picked up a piece of dry bamboo from the ground and lighted it. He then went three times round the tents, muttering incantations. Each time he came to the entrance he knocked off the ash from his burning stick and spat upon it, making a small mud ball. These curious proceedings over, he turned to Sanders.

" There will be fleas to-night," he said, " but not many, and after to-morrow there will never be any more."

And it was so.

Sanders asked him if he could not also free the place from mosquitoes, but the old man shook his head and replied that another " devil god " dealt with mosquitoes, who would be offended if his province was encroached upon. Truly there are more things in Heaven and Earth— !

An Indian turned up at the camp with a story that a friend of his knew of some iron doors within half a mile of us. We offered to pay him two hundred Bolivianos if he

would lead us to the place. He declared himself quite satisfied with this amount and promised to return when he had spoken to his friend. We waited in vain. Probably the doors only existed in his imagination. If they were real why did he not break them open himself, or if he was too superstitious and frightened, pay a friend to do so?

Another Indian, reputed to be 137 years old—there is no doubt that some of them attain a very ripe old age—told one of his descendants who was working for us, that we were looking for the treasure in the right place. He said that he remembered his father telling him how the Jesuits had carried out some big work on the exact spot where we were now digging, also that there were three iron doors in a passage leading to a chamber.

Another thing we learned was that, in the previous November, a party of Turks or Armenians had come from Cochabamba with a gold-finding machine with which they had experimented all over Plazuela, Cavallo Cunca and the Negro Muerto. They had had no results until they reached the Square Stone Heap, when the indicator of the machine suddenly pointed straight downwards to the exact spot indicated by our photographs. The man who gave us this information had been working with us as a blacksmith for months. When asked why he had not given the information sooner, he replied that he did not think it would interest us. It appeared that he had helped to carry the machine and had actually seen the needle move. We endeavoured to get him to lead us to this spot but, unfortunately, we had already changed the surface of the ground so greatly by our digging operations that he could not be sure of the place within several yards. That this party of men had been over the ground we verified from other sources and also found that they had made an unsuccessful attempt to raise capital to form a company.

We had been expecting a reply to our letter of August 2nd, with the indications from the new vertical and horizontal photographs which we had sent. On September 11th this cable arrived. Sanders was away at Palca dealing with the Simon matter, so Shotton and I read the cable and, after making a very careful examination of the photo-



Llamas

graphs, came to the conclusion that we were far enough with the cut into the hill on the Square Stone Heap and that it was now necessary to go deeper in a certain spot.

I at once put on the men to this work and had a crane re-erected to expedite matters. I was a little nervous about taking this decisive and drastic step because some of the indications of the vertical and horizontal photographs did not seem to coincide. Sanders came back a few days later and was as puzzled as the rest of us, so a long cable was sent off requesting fuller details. The reply confirmed our impression that we were on the right spot and stated that all the reactions that were given were of gold with one exception, which indicated silver. It will be remembered that the document mentions " a large box clamped with iron bars, inside this box are 90,000 Duros Reales in silver money."

Before the arrival of these cables pessimism had again become rife in the camp, and three members of the expedition had decided, on one pretext or another, to depart for England, Home and Beauty. But on the strength of this report a better feeling again prevailed. Since the season was growing so late a night shift and Sunday work was started. Hardman, Chadwick and I went on with our preparations to go to Monte Sapo and Hilgarth took charge of the Square Stone Heap.

CHAPTER VIII

THE RIVER OF FOOL'S GOLD

AHLFELD arrived on September 21st. Block had some Government work to do so could not come with us. Ahlfeld declared that a sluice box was essential, so we left Chadwick behind to see to this. We were very short of mules. Some were fetching supplies of petrol, others were sick or saddle-sore, so Ahlfeld, Hardman and I set off for Monte Sapo with only three cargo mules. This meant cutting down kit and supplies to the barest necessities until Chadwick followed us with another mule train.

We stayed the night at Siliplata, Señor Urey's ranch, and set off again early next morning. For the first two hours it was one long steep climb up to the crest of the mountains, then for the rest of the way our path led down narrow winding trails to the little Indian village of Tultuana which lies at the foot of Monte Sapo, which we reached at six in the evening. It was a poor place, the huts built of mud and bamboo with thatched roofs. We dined off a scraggy chicken and slept under the verandah of one of the huts. Insect life makes it impossible to sleep inside one of these native dwellings. Next morning an hour's ride up hill brought us to the camp of our six Indians who had been sent on ahead to clear a trail. Then came another two hours' very hard climb up a steep hog's back covered with bamboos, some over fifty feet high, quanna trees and thick undergrowth. Thankfully emerging from this thicket, we found ourselves near the top of the mountain, where we cleared the ground for our one tent which the three of us shared, and stretched the waterproof fly sheet over bamboos so as to make a shelter under which we could feed. By the time we had dug ourselves in a heavy Scotch mist had

covered the whole top. It drenched everything and the air was bitterly cold. Luckily we had plenty of blankets.

The views were magnificent, when the mist rose sufficiently to allow us to see them, but from the moment the sun rose we were eaten alive by midges. They swarmed into our tent in millions and all we could do was to light our pipes and puff as hard as possible. Before each meal we had to make a "smudge fire" under the table, otherwise it would have been impossible to eat. There were no mosquitoes.

We began by examining certain caves and tunnels worked by the Jesuits, and possibly by the Incas before them. We found great veins of sodalite fully two yards in width. Sodalite is a semi-precious stone of the lapis lazuli family —deep blue in colour with white veins. There is an altar in Rome and some small pillars made from the sodalite of Monte Sapo. To-day it is used for making ornaments and is worth about £40 per ton, but the small demand and the enormous cost of transport prevent the mining of it from being a commercial proposition. In olden times, when labour was forced and unpaid, it was different. Our camp lay at a height of about ten thousand feet. Monte Sapo rose another fifteen hundred feet above us, and in this summit we found many silver veins and old *sacabons*— tunnels made by the Jesuits. Curiously enough there were several small lakes right up at the top of the mountain.

One morning Ahlfeld went off on a surveying expedition with one of the Indians. The mist came down even more heavily than usual. Darkness fell and there was no sign of Ahlfeld. We spent an anxious night. In the morning it was clearer. I made a white flag out of a pillow-case and fired three shots from my rifle to bring the Indians up from their camp to go and search for him, but that night there was still no news and Hardman and I were really worried. Next morning, however, a runner arrived from the village below and told us that Ahlfeld had arrived late the night before at the village and that he had spent the previous night in the forest. The mist, it appeared, had been much thicker on our side of the mountain than on his. Happily he was none the worse for his unpleasant experience.

Hardman and I spent a day working down the river bed towards Tultuani searching for a spot to which we might move the camp so that we could test the alluvial deposits. We had been told that there were millions of tons of alluvial with gold in payable quantities, and the idea was that we might be able to start washing this at once, while a company was being formed to exploit the supposedly rich veins of gold ore higher up. Ahlfeld damped our ardour by declaring that there was no indication of gold formation; he said that there were very few traces of gold, as also of silver and copper, none of these metals being in payable quantities. A week later Chadwick arrived and we moved camp to the outskirts of the village as there was no clear ground closer to the spot where we proposed washing for the gold. We had been lucky enough to secure a large room in an Indian house and the use of the kitchen.

I slept in the room and the others in tents outside. The room was typical of the better class of Indian houses. It was twenty-eight feet by eighteen, but had no windows and only one door, which led on to a covered verandah. The walls of mud and straw were eighteen inches thick, and the roof was made of split bamboo covered with mud and thatch. The floor, too, was mud, but had no air space under it, and since the room had no windows, it was horribly damp and bitterly cold. On account of the shade of the verandah the sun never reached the one wall it might have warmed. The one consolation was that the room had a door with a real padlock, which made it most handy to keep our stores in.

They have curious ideas about padlocks in Bolivia. At Urey's ranch there was a large wooden padlock with a wooden key on the door of his mill house. He told us that no one would dream of going in so long as the key was left in the padlock; but should it be taken out any Indian would consider himself quite justified in breaking in.

Though the house in which we lodged had only recently been built we found it full of ladders, filthy old cowhides and rotting maize which the owner intended to make into *chicha*. He was amazed when we insisted in clearing out all this mess and giving the place a good dressing of creosote.

By putting up shelves we made it more or less habitable. While we were doing this I noticed that one wall was liberally bespattered with blood stains, and my first ungracious thought was that we had got possession of the house so easily and at a nominal rent because some foul murder had been committed there. No such tragedy had occurred. Enquiries proved that on completion of the building the owner had offered the sacrifice of a cock to the Bolivian God of Luck. The custom is, of course, one of the oldest in the world, but it is interesting to find that it survived among Christianized Indians of Bolivia. One thing for which we were grateful was that the roof was thoroughly weather-tight. It was certainly well tested, for the rain came down almost incessantly.

We now started to examine the alluvial ground under Ahlfeld's guidance and tuition. We dug out the earth from the banks and bed of the river and sieved it through a riddle of one-inch mesh, washing the residue in wooden *batias* (panning dishes), but in one case only did we get the faintest trace of colour. The river's name is Corimayo, which means River of Gold. Certainly there is plenty of glitter about it, but this appearance comes from particles of mica and pyrites, not from the precious metal itself. Its bed is one mass of big boulders, which are constantly being carried down by floods. These boulders have raised the bed several metres during the past century and have completely covered any alluvial that may exist beneath them. We made an effort to sink a shaft at the side of the river bed so as to reach whatever was beneath these boulders, but found it impossible. Water poured into the hole and we had no pump. At last arrived the mule train bringing the *pukka* gold-washing sluice box which had been made in Sacambaya. In great hope and expectation we rigged this up, but after many days of hard work found only one microscopic trace of gold—this at the very spot where Herr Block's assays showed one gramme of gold and forty-three grammes of silver to the ton!

An old Indian named San Pedro Pilar advised us to prospect what is known as the *picacho*, a ridge some seven hundred feet high, split strangely into shaped crags on

which stand *chulpas*. Pilar, who admitted to ninety-one summers but was still very active on his pins, declared that articles of value might be found in these old burial places. They are tombs built of stone and mud, with a door shaped like an inverted " V " ; the doors always face towards the east. We climbed the hill to find that most of these *chulpas* had already been broken into, yet there were a few that remained untouched, and I determined, when opportunity offered, to do a little excavating work. I had seen fragments of gold and silver ornaments which purported to have been found in them.

Pedro Pilar said that he had washed gold many years ago in a spot to which he led us. We did some washing and certainly found more traces of gold in our *batias* than we had previously succeeded in discovering. Pedro told us, also, that he had found articles of silver, probably of Inca origin, in the crags that had broken away from the main mass. He spoke, also, of ruins of a village and church on the far side of the river deeply buried in the forest.

This village, I made up my mind to visit if opportunity occurred, as well as certain points on the way up to our first camp. We noticed that the whole ridge had been cut into terraces by the Jesuits, while here and there were holes in the ground which had been bricked round. These very much resembled the *tapadas* which I had found in Cuticutini.

Don Juan Mendizabal, who had been with Sanders on his previous expedition, and whose family at one time owned the land on which the Sacambaya treasure is located, had been approached by an Indian who had objects made of silver which he had dug up and which he wished to sell. He had been anxiously awaiting the arrival of the *gringos*, from whom he expected to get the extortionate price of sixty Bolivianos. I was interested and sent for the man. A few days later he turned up with seven silver pins. Three were perfect and measured from eight and a half to twelve inches in length. The tops of the other four were broken. They were exactly similar in type to those I had found at the Fortress and at Cuticutini, but the latter were much smaller, being only about four and a half inches in length. Ahlfeld bought the heaviest, which had a crude design upon

it, for twelve Bolivianos ; Hardman had a twelve-inch one for five Bolivianos, while I got a third, ten and a half inches long, for three Bolivianos. The remainder were purchased by one of our Indians for six Bolivianos, I expect with the idea of reselling to members of the expedition. I never heard if he made any money on the deal.

On October 6th it was so cold that I was not surprised to see snow covering Monte Sapo down to the point where our first camp had been made. It is true it soon melted, but this was supposed to be the commencement of the summer. We had expected rain, but not snow.

The glittering samples which we had obtained from the river we had handed to Ahlfeld for his inspection, but he disdainfully dismissed them as mica or pyrites, a decision which deeply depressed us. Ahlfeld had repeatedly told us that the formation of the rocks was foreign to gold, and that, so far as he could see, there was not the least chance of finding gold in paying quantities. He completely contradicted Block's report. It is possible that there were gold bearing veins higher in the hills, but these we had, so far, failed to find. We discussed the position with Sanders, and it was decided that he should not go to Cochabamba, where he had been intending to spend four thousand Bolivianos in registering our mining rights. Sanders said Pedro Pilar had spoken of some old Jesuit workings in the hills, and it seemed worth while to investigate these.

Next morning Ahlfeld, Pilar and I set off at six o'clock and climbed steeply through a forest of bamboo and quanna. After two hours' scrambling the hill became too steep for our mules, so we left them and climbed on foot for half an hour. Then San Pedro pointed out a small triangular clearing just below the forest line on the opposite side of the valley. I told the Indian that in my opinion it would have been more easy to reach this place by riding up to our old camping ground and turning off afoot at right angles. The old man agreed, but pointed out that he could not have walked the distance on account of his age. Later I was to learn that the seemingly smooth and easy way, as viewed from the crest on which we stood, was an almost impossibly difficult passage.

I sent Don Juan with three Indians to investigate. It took them no less than three hours' hard climbing to reach the clearing. I was able to watch them the whole time from my lofty perch. San Pedro and I sat together on a rock, and while we munched our sandwiches he told me that, when he was a young man, he was making his way through this forest when he came across a life-size golden cow with water running out of its mouth. He was so frightened, he said, that he ran away and though he went back later, he was never able to find it again. These Indians imagine so many wonderful things that it is most difficult to know when their stories are true or when they are pure fabrication.

Ahlfeld left us next day, but since there were plenty of people to carry on the work at Sacambaya, Don Juan, San Pedro and I remained in the hills to collect samples for assay from any likely place we could find or hear of from the Indians. It cannot be said that we had much hope of success, for Ahlfeld, who certainly knew his business, had assured us that there were no good gold mines in Bolivia. He told us of one that had been working on American capital for fourteen years without paying a dividend. Of silver there was, of course, plenty, but all the richer mines had been pretty well worked out by the Spaniards. It is said that they knew of no fewer than thirty-three thousand silver mines, but there are only ten working to-day. The method which the Spaniards employed for discovering veins of silver was simple but extremely effective. Any Indian slave who discovered silver and informed his patron was at once made a freeman.

CHAPTER IX

FLOODED OUT

ON October 20th news was brought us that Hilgarth, who was in charge of Sacambaya, was having great trouble with ground water and that the sides of the pit kept caving in. In a note he told us that he was trying to dam the water by means of sacks filled with earth and petrol tins flattened out and soldered together. If the rain ceased he hoped to reach the required depth in about ten days. But the rain never ceased where we were on Monte Sapo, so it was fairly certain that the weather was no better in the valley of Sacambaya. Again I began to feel somewhat discouraged, but I decided not to return just yet.

November 2nd was All Saints' Day, a *fiesta* dedicated to the dead. We took the day off and went to see what was doing. After some trouble we found the burial place, just an unenclosed piece of ground outside the village where little bare patches in the grass marked the graves. There were no head-stones, crosses or even mounds for the tombs. A few tarpaulins were stretched over poles and under their shelter all the Indians from the village, as well as those for miles around, were congregated. Bread, meat and large quantities of that potent spirit, *chicha*, were being distributed by the women. Most of the men were too drunk to stand, although it was still early in the afternoon. Those who were able to keep their feet stood in long lines, vigorously crossing themselves—presumably praying for the souls of the dead or for the spirits to come. At the end of one of these rows a woman crouched, selling bread and cakes. She was actually squatting on a patch that marked a grave. The effort of crossing himself caused one of the men to lose his unstable balance and fall flat in the midst of the eatables. The woman jumped up in a rage and rated

him soundly, and this brought the religious ceremony to an end.

The Indian owner of our hut saw us on the hillside and presently arrived carrying a plate of bread and meat in one hand and an enamel mug full of *chicha* in another. This was a courteous act we had not expected. The *chicha* looked like milk and water and tasted like bad, sour beer. There are many ways of making it, but it is generally brewed from maize or flour. Often the maize is chewed by the women. Whatever the method of preparation, the result is usually terribly potent. Much to my disappointment there was no music or dancing so, as the rain continued, we retired to our hut.

Next morning came a summons from Sanders. He told us to return at once as the work of the expedition could not be continued on account of the rain. Our pumps, he said, were utterly inadequate to cope with the water. Everything had been tried, dams, unceasing work day and night, but the best result was just to keep the water at the same level. "I could not tell you how I feel," he wrote. "Heartbroken is a very mild world for it; there are moments when I feel that my hair has gone white." He said he was leaving for La Paz at once, but wished to see me before he left, so I got away at once on the mule which he had sent over, leaving Chadwick and Hardman to strike camp and follow on when the mule train arrived.

With the idea of doing the journey in one day, I determined to try the short cut over the mountains, the same against which Pedro Pilar had warned me. For the first three hours' ride until I reached the top of the ridge I could hear the rolling of drums which, now that the Festival of the Dead was over, were being beaten. There is an indescribable, haunting fascination in the beat of a drum throbbing over the great hills, and, from a practical point of view, the carrying properties of the sound make it easy to understand why it is the universal signalling system of nearly all savage tribes.

Before I set out I enquired from the Indian who had brought the mule, and who was coming back with me as guide, whether he knew the short cut.

" Si, Señor," he replied. I knew the first part of the trail, but when on reaching the crest I asked him which track to take, he again replied, smilingly, " Si, Señor."

Then it dawned on me that these were the only words of Spanish he knew. His effort to be pleasant and appear intelligent caused me to take ten hours over a journey that should have been done in six. To add to my troubles, I got caught and soaked in a mountain mist, and I was beginning to fear that I should be forced to spend the night in the open when, just as darkness fell, I caught sight of Señor Urey's ranch in the distance.

Next morning I rode down to Sacambaya and found everything being packed up. Stone huts were being built as store-houses for the machinery and other material too heavy to take back to La Paz. Four members of the expedition had already left. I had a long talk with Sanders and quite agreed with him that it was useless to attempt to carry on with the digging in face of the influx of ground water. The rainy season was setting in and, as we knew, would last without a break for four or five months. It seemed that the only thing to be done was to return to England, thoroughly test out the photography theory, then put the matter before the shareholders for them to form a committee to make a further and independent test. We thought there should not be the slightest difficulty in raising the necessary capital to come out and try again. How these hopes were falsified I shall relate later.

When I got back to camp I was naturally interested to hear all the happenings, quarrels and troubles that had arisen during my absence. I soon realized how the last days and nights of unremitting toil, coming on top of the long months of monotony, had strained the nerves of all the white men in the camp. The night on which it was decided to abandon the work one hard-bitten fellow sobbed like a child, while several others admitted they were near to breaking point. One of the quietest and seemingly least emotional of the party, having his leg pulled, suddenly seized the joker by the throat and half throttled him before he was hauled off. He was white and trembling. Afterwards he apologized, saying he could not explain what had

made him do it. Yet, on the whole, the members of the expedition had got on extremely well and there were surprisingly few quarrels among them. Much of the grousing towards the end of our stay was due to one of the company who should never have lived more than a hundred yards from the Ritz Hotel. This man was constantly starting grievances, trivial ones, it is true, and mostly squelched at once, yet the insidious poison of his discontent spread among the others. There were no discomforts in the camp, which was remarkably well found in every way. Actually there was no " roughing it," though it is true that the butter ration was cut down to two meals a day. For twenty-three people with big appetites, butter at three and sixpence per pound became a serious item in the expense account.

Sanders encouraged the grumbles because—when matters came to a head—he enjoyed squashing complaints that had been magnified into grievances, but he made the mistake of playing for a *coup d'état.* I must admit that he was too clever for the rest, but he only gained a surface victory; the grievances still remained. His boast was that " tact was not his strong point," but tact is the first essential in the leader of any enterprise. The high-handed, rough-shod method is more spectacular, but it never obtains good or lasting results.

We sent the rifles, revolvers, machine-guns, ammunition, etc., to be looked after by the Caracoles Company at Eucalyptus, then, as mules became available, sent off the members of the expedition in twos and threes. By November 10th, when Sanders returned from La Paz, Hilgarth, Chadwick, Gerstman and I were the only white men left at Sacambaya. On the 11th Sanders and Hilgarth went to Gaichani to get Aguilar to sign a renewal of the rights of the treasure lease. Gerstman, Chadwick and I rode to Quimé to wait there until they joined us on the following day. In the morning, when Sanders and Hilgarth arrived, we chartered a lorry, and after stopping at Pongo for an hour, reached Eucalyptus at half-past seven that evening.

There had been a deal of talk among the members of the expedition as to how they would spend the five or six months that might elapse before the Company could renew opera-

tions. All sorts of crazy schemes were suggested, many adventurous and ambitious journeys, but most of these vapourings ended in the dreamer going home by the prosaic route from Arica. I suggested to one man that he and I should cross Lake Titicaca and join the ship at Mollendo, seeing Arequipa *en route.*

"What's the use, my dear fellow," was his answer, "I shall be so drunk I shan't see anything!" Such are the results of prohibition!

At Eucalyptus, talking to Mr. Johnstone of the Caracoles Tin Company, I said I did not care where I went, but that I certainly did not think it would be interesting to spend two months out of the six which I expected to elapse before returning to work in making the voyage to England and back. Mr. Johnstone suggested going to Quito. I had to confess that I had not the vaguest notion where it was, but when he had explained, I liked the idea of following the trail of the old Conquistadores. Johnstone told me that he had made the trip from Quito to Cuzco twenty-five years earlier and that it had taken him five months. Cuzco to Quito sounded nicely alliterative; also I badly wanted to see Lake Titicaca, so then and there I made up my mind to go.

In the train next morning on the way to La Paz I told Sanders and Chadwick of my intention. Chadwick said:

"If you really intend to go to Cuzco I would like to come with you." I was delighted, for I had not relished the idea of going alone. Sanders chipped in that it was a trip well worth making, and suggested that we should go back to Sacambaya and equip ourselves with tents, rifles, shot-guns and the like. We were, however, too sick of the place to think of going back, even for a couple of days, but Sanders lent me a saddle and two saddle-bags that he happened to have with him.

My idea was to buy mules in Cuzco and ride northwards. Arrived at La Paz, we left such of our kits as we did not require with Señor Buck, and Chadwick and I obtained permits and visas—that for Peru cost us fifteen Bolivianos, equivalent to twenty-five shillings. Then we bade farewell to our companions, who were returning home by the *Orduna.*

The Peruvian Consul, from whom we obtained our permits, and who knew that we had just come from Sacambaya, told us that one of the Indians on his ranch had brought him a bar of gold which, he said, he had found on his—the Consul's—land. The Indian declared that he knew of more gold but that the place was difficult of access. The Consul asked us if we would be willing to explore for him, and we promised to do so on our return from Quito. We had the mistaken notion that we should be back in a few months. Nothing would have pleased us better than to have gone straight away to search for this treasure, but all our arrangements were made for the journey and tickets taken for the following day.

Here it will be well to explain what happened after our departure. Sanders was of Russian birth, but during the war had become nationalized in Switzerland. Owing to some trouble over getting his passport renewed he had applied for Bolivian papers of naturalization, and on the very day we left these were granted. What followed is best described in his own words. I append here the report that was published in the *Star* of December 17th, 1928:

"In the following declaration I have described the circumstances of my arrest and release in La Paz, the capital of Bolivia. The statements seem so incredible that I thought it wise to make them on oath. The statement, which was sworn before Mr. E. A. Yapp, the British Vice-Consul here, is as follows:

"RIO JANEIRO, *Monday.*

"I, Edgar Sanders, mining engineer, at present residing at the Phœnix Hotel, Calle San Martin, Buenos Aires, make oath and say as follows:

"I sent off all the members of the Expedition to England, settled all odds and ends, and was then ready to leave myself. The night before leaving La Paz—the capital of Bolivia—I was called to the police prefecture and accused of having smuggled into Bolivia 150 rifles, 24 machine-guns, 100 lbs. of poison gas and many tons of munitions for the purpose of starting a revolution and overthrowing Hernando Siles, the actual President.

"I thought it was a huge joke, but was told that the

matter was extremely serious. I was forbidden to leave Bolivia under the threat of immediate arrest, and from that moment till I left I was constantly watched by the police. I told the police that I had brought with me twenty rifles, twenty Browning pistols, two machine-guns and an adequate amount of munitions for protection in the wilds of Sacambaya, that all this was declared to the Customs at Charana when entering Bolivia, and the authorities let it pass without the slightest objection. The Chief of Police declared this to be a barefaced lie. I told him that the arms and munitions were left at Eucalyptus in the care of the Caracoles Tin Company, and there they could verify the number.

" Urgent telegraphic orders were sent to the Chief of Police at Eucalyptus to confiscate all the arms and send them to La Paz. I was allowed to return to my hotel, but the police stood watch outside my room. I was told by the police that I had been denounced by a man called Juan Godefroy, a friend of Ramon Paz, President of the Bolivian Senate, equivalent to the British House of Lords. Ramon Paz reported the matter to President Siles, and the latter ordered the police to investigate thoroughly and report the progress of investigations to him every day.

" When I heard the name of Ramon Paz mentioned I knew immediately that he intended blackmailing me. Some two months ago Godefroy came to Sacambaya and said Ramon Paz had sent him to tell me that I should send him a substantial present in return for which he would become my friend and protect me against Government interference, otherwise he would create difficulties. The present had to be at least five thousand Bolivianos (£375). I told Godefroy to return where he came from and tell Ramon Paz to go to hell, and that I had not the slightest intention of paying graft to the President, Senate, or other Government officials for absolutely nothing.

" While at Sacambaya Godefroy tried to find out everything about our work, equipment and organization. Next morning, after being called on by the police, I went to see the British Minister, Mr. Mitchell, and asked for his help. Mr. Mitchell said he had been called by President Siles

several days ago and was asked what he knew of a revolution that the Sacambaya Company intended starting in Bolivia. Mr. Mitchell tried his best to prove to the President that this was the greatest imaginable nonsense, but the President did not believe him, despite Mr. Mitchell's assurance that all the members of the expedition had left, and that he positively knew that arms were brought by us for legitimate purposes only.

"Mr. Mitchell gave me an introduction to Señor Palacios, Minister for Foreign Affairs. I went to see him, and he said he would only arrange things if I turned all our company's property over to him. I had to refuse that. For some ten days I was harassed by the police. I was stopped once or twice every day and taken to the police prefecture to make declarations, and was continually threatened with arrest. The arms and munitions were confiscated at Eucalyptus and sent to La Paz, but on the way, under a guard of policemen, six carbines, fifteen pistols and the best part of three cases of munitions were stolen. The Chief of Police at Eucalyptus also took a motor cycle belonging to the company and hid it in his house. He also wanted our two lorries, but I managed to get them in time to safety out of his reach.

"All the time Mr. Mitchell and his secretary, Mr. Robertson, did all they could to help me, but President Siles was obstinate to all their efforts. I was told that Ramon Paz was seeing President Siles every day and was exciting him against me. Then Ramon Paz sent me word that I should come to see him. I went to see Ramon Paz, who would not receive me in the presence of a witness, but only alone. He said he would arrange the matter at once if I paid him ten thousand Bolivianos (£750). I could not pay this amount, but, as I was getting desperate, I offered him five thousand. I had to do this as no legitimate sources of defence were of any use.

"Ramon Paz accepted, and I paid him five thousand Bolivianos in cash. He did not want to take a cheque. The next day he called me again and said I had to pay him another five thousand, otherwise he could not arrange this matter and I would be arrested. I was thunderstruck and

refused to pay any more. I called him a thief and many more things, till he virtually had me thrown out of his office. An hour later I was arrested in the street by order of President Siles himself, and taken to the Police Prefecture, and was informed that I was under arrest, and had no right to communicate with anyone, not even with my solicitor. I was put alone in a room with an armed guard at the door. News of my arrest spread round, and my lawyer made every effort to get me out of gaol. By paying, he succeeded in having me released under security.

" I did not know what to do. I saw Mr. Mitchell again, and also the Prefect of La Paz, Hugo Ernst, but the influence of Ramon Paz was stronger, and President Siles would not give in. Then a friend of mine at La Paz took me to another influential politician, a member of the Bolivian Parliament, and an ex-minister, but whose name I do not wish to mention, because, though paid for his services, he did get me out of trouble. This member of Parliament agreed to arrange the matter for one thousand Bolivianos (£75) and obtain for me a permit to leave Bolivia. This time I refused to pay beforehand, and my friend guaranteed payment to this politician after I was beyond the frontier of Bolivia. To this arrangement he agreed. He went to see President Siles, and brought back the permit for me to leave. What he did or said to President Siles I do not know, but apparently he was stronger than the blackmailer Ramon Paz, and certainly cheaper.

" Officially everything in Sacambaya, and also the arms which were not stolen by the police, remain the Sacambaya Company's property, but what will actually happen to all our property I do not know. I think this will have to be settled through the British Foreign Office. Of our other three directors, Hilgarth was on his way to England on the Dutch steamer *Boskoop*, Jolly is somewhere in Peru and Ripley's whereabouts I cannot ascertain. Alone I could not do anything more for the moment than save myself from the claws of the blackmailing Bolivian high officials. A police party was sent to Sacambaya to examine our stores there, and I understand that quite a few things have been stolen there by policemen and the sub-Prefect of

Inquisivi himself, who led the party. I was not allowed to make any further arrangements for the protection of our property.

"I left Bolivia last Wednesday and arrived here on Sunday. I am sailing in the Italian steamer *Duilio* for Villefranche, where I shall arrive on December 26th. Please notify Neal, Secretary of the Sacambaya Exploration Company, of these occurrences, and he should immediately start proceedings to protect our property in Bolivia, and see if it is not possible to recover the money blackmailed from me by Ramon Paz, President of the Bolivian Senate, and damages caused to me and the Company. So far as I know, Government politicians want to take everything away that we have left behind and not permit us to continue our work next year.

"Formerly there were legal guarantees in Bolivia, but under the administration of President Siles all rights are abolished, due to the state of siege declared permanently, and graft, theft and blackmail are rampant from the lowest official and politician up to the highest. This thing lasted over two weeks, and cost in graft and expenses over nine thousand Bolivianos. The British Minister, Mr. Mitchell, knows the situation in detail."

Cuzco to Quito

CHAPTER X

THE ROUTE OF THE CONQUISTADORES

THE train for Guaqui left La Paz at seven-thirty on the morning of November 17th. The previous night had been a late one. It had been one of farewells to the rest of the crowd, who were returning to England. We had left word at the hotel office to be called at six. Of course, they did nothing of the sort, and it was seven o'clock when Chadwick, who happened to awake, called me. Two very breathless passengers managed to throw themselves into the train just as it began to move. Which was just as well, because there was not another train for a week.

It is a four hours' run to Guaqui, which lies on the shore of Lake Titicaca. At midday we embarked on the *Inca*, a steamer two hundred and twenty-eight feet long, thirty feet beam, built to carry eighty-six first-class passengers and one thousand tons of cargo. My first thought was how in the name of all that is wonderful had this big vessel with all its heavy machinery been transported to Lake Titicaca, the highest navigable lake in the world, twelve thousand five hundred feet above sea level and more than three hundred miles from the coast. Reference to the guide book informed me that she was brought piecemeal over the railway and reassembled. A far more marvellous feat was that of bringing the *Yavari*—still running—and nearly as large as the *Inca*, to the shores of the great lake so long ago as 1861, before there was any railway at all. Every bit of her was carried up on the backs of mules and Indians.

Lake Titicaca is one hundred and thirty-eight miles long and sixty-nine miles wide. The water is fresh but unpleasant for drinking purposes. It is said to be seven hundred feet deep. A number of rivers which are of considerable volume

during the rains, fall into it, and it is drained by the Desaguadero, which flows out at the south-west angle. But evaporation is very heavy and the waters are gradually receding. I was told that only one kind of fish thrives in the lake, which looks like a cross between a chub and a trout; it is small, plentiful and quite good to eat. Many efforts have been made to stock other varieties, but so far in vain. There were only a dozen passengers besides ourselves, nine of whom were Americans. It was a delightful voyage.

The horizon was an endless line of magnificent snow-capped mountains. One had the extraordinary feeling of floating on the top of the world. They told me that the storms are terrific, but we were favoured with beautiful weather.

Just as the sun set we passed the exquisite islands of the Sun and the Moon, where lay the sacred gardens of the Incas. I missed some gorgeous photographs, since the shutter of my camera chose that moment to jam. At half-past ten we arrived at Puno, where the passengers for Arequipa and Mollendo entrained. Those for Cuzco slept the night on board, but we had to have our hand-baggage carried out to the Customs on the quay for examination. I carefully left my automatic and cartridges under my pillow in my berth, so passed the examination quite successfully.

Next day, November 18th, I was on deck at dawn. It was a heavenly morning, the sun shone brightly, the lake, a golden mirror, reflected the giant mountains. The shore was covered with Indian men and women in their brightly coloured *ponchos* and skirts. *Balsas* drifted in from the islands with their products. There is no timber for boat building at this great height, and the *balsa*, incredible as it may appear, is built entirely of straw, or perhaps I should say reeds, small bundles of this material being tied together with amazing ingenuity. Even the sails are made of reeds. These boats, some of which are of considerable size, are shaped like canoes and are said to be quite seaworthy. They have, however, but a short life.

There was a tinkling of music from an Indian seated in

his *balsa* and playing a tiny four-string guitar—a haunting, rhythmic cadence. He stopped abruptly, and the refrain was taken up by another instrumentalist—the same air, the same rhythm, yet a totally different meaning, for where the first had breathed peace and gentleness, the second was defiant, almost aggressive. It was one of those incidents, trivial in itself, yet which remain in the memory.

At seven o'clock a Custom House official came hurrying aboard in a great fuss because our hand-baggage had not been examined and the train was waiting. However, his superior officer suddenly remembered that it had been done the night before, and off we set for Cuzco. First came a slow ninety-nine mile climb through bleak and treeless mountains rising to fourteen thousand one hundred and fifty feet at La Raya, which is the highest point on the railway, and one of the highest stations in the world, then followed a quick descent of two thousand five hundred feet in twenty-four miles to a place called Sicuana, with brakemen posted on the tops of every coach. This is a most necessary precaution since llamas, donkeys and Indians frequently invade the metals. After La Raya every inch of the valley and every little ravine running up into the mountains is cultivated and beautifully green. Splendid crops of maize are grown in these valleys, also the grain, called *quinua*. We saw any number of birds, and I am told that even the little green parakeet is seen at a height of twelve thousand feet. There were plenty of houses, and these looked distinctly more habitable than those on the Bolivian side of the mountains.

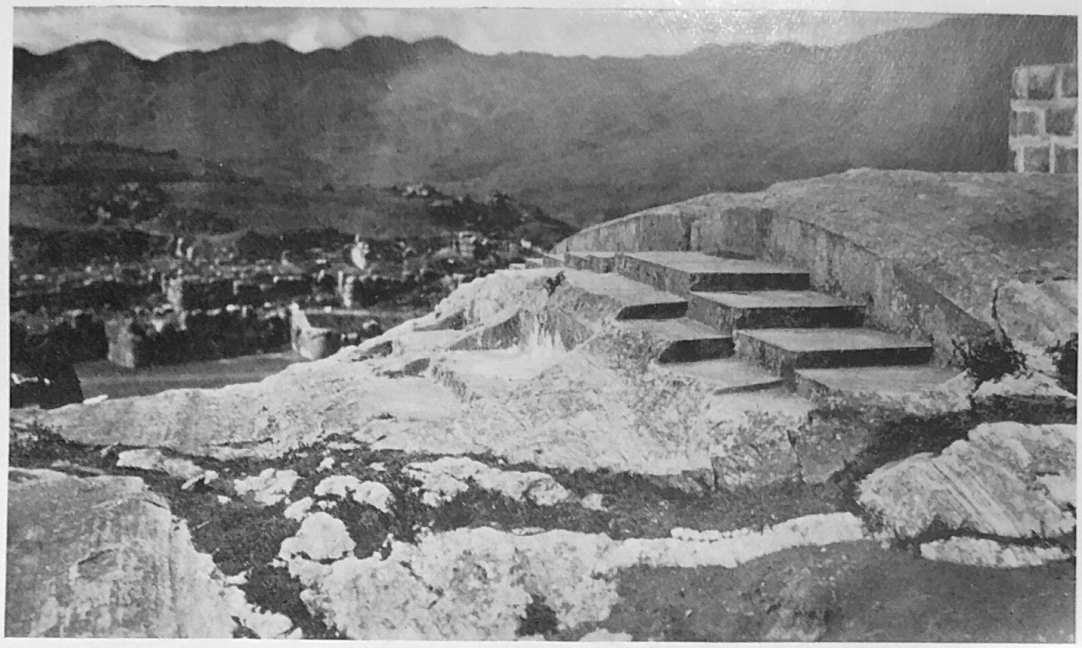
It was dark when we reached the Hotel Colon at Cuzco. This was a primitive hostelry and we caused some excitement by demanding a bath. There was only one in the place, heated by a form of geyser which took most of the staff to get going.

Morning found us up betimes. Our windows overlooked one of the principal Plazas, which was full of flowers. In the centre stood a painted statue of Manco Capac, the famous legendary Inca hero. It was purely comic, for he was dressed in a kilt, wore a Glengarry and had golden curls down to his waist.

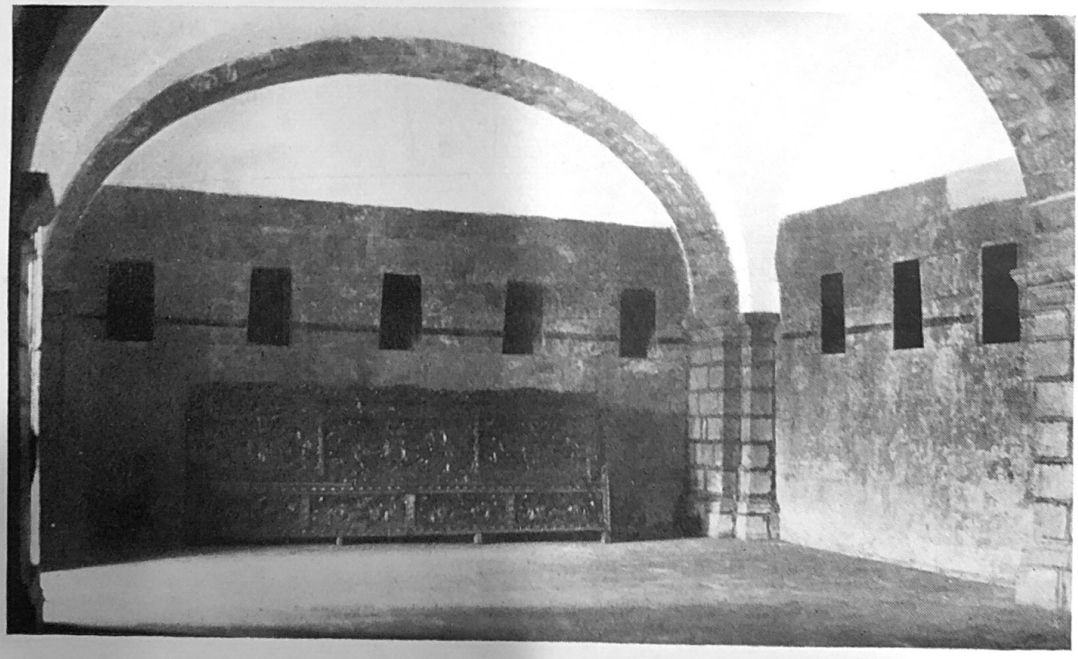
Cuzco, the capital of the old Inca empire, is but a ghost of its former self. It stands eleven thousand four hundred and forty feet above sea level in a valley of the Andes, three hundred and forty-five miles from the port of Lima. At the time of its conquest by Pizarro, in the year 1533, it had two hundred thousand inhabitants; to-day its population is only about twenty thousand. When the Spaniards conquered Peru the Catholic religion was enforced on all natives and every effort was made to crush out the extraordinarily advanced culture of the Inca civilization. This effort was largely successful, yet the whole country around Cuzco is still full of traces of the Incas and of that strange and unknown civilization which preceded them. Archæologists and antiquarians are greatly at variance on the history of the Incas and the pre-Incas, but they seem to agree, more or less, that the pre-Incas or Amautas were destroyed either by an invasion by barbarians, by a great earthquake, or a pestilence, and that the survivors formed themselves into tribes and dropped rapidly in the scale of civilization. The amazingly high culture of these pre-Incas is proved by buildings which still stand and are universally ascribed to them.

These wondrous walls and buildings are perfect in symmetry and line, untouched by time or even earthquake. What a people to have wrought so wonderfully! Each stone is cut with consummate artistry and skill to fit the contours of the next, with such exactness that it is literally impossible to insert a needle point between them. There is no cement or mortar to cover up any deficiencies, and this applies not in one isolated case, but to all the miles of walls and buildings that are in or near Cuzco to-day. Had these huge granite blocks been square a solution would have been more easy to find, but some of them have as many as twelve sides and all at different angles. It would have been sufficiently wonderful had these blocks been small in size, but some of them, as at the Sacsahuaman fortress, are not less than twenty-five feet long and twelve thick. If the Egyptian pyramids amaze the moderns, what must be said of such work as this?

By what power were these stones cut and placed in



Cuzco, the fortress of Sacsahuaman. The Throne of the Incas, a place of worship and probably the seat of the Inca and his Court to view the *fiestas* held below



Temple of Venus and the stars at Cuzco. This shrine has twenty-six pyramidical niches; the significance of the black line cutting these is not known, but is presumed to represent the division between Heaven and Earth. The arches are not Incaic, but belong to the Spanish period

position? Many conflicting theories have been evolved, yet these questions remain without answer. The Indians declare that an acid made from herbs, of which the secret is lost, was used to soften the granite. For me it is sufficient to see these works of art to be able to pass my hand lovingly over the smooth contours, as one does with a bronze, and feel its utter perfection.

In many places these walls have been brutally covered with plaster and white-wash, while more than two-thirds of the stones of the magnificent fortress of Sacsahuaman have been carted down to Cuzco to build cathedrals, churches and the like. Cuzco is now a good example of the Spanish Colonial period, with its ornate churches, colonnades and very attractive patios. If only the local authorities would realize it, they have one of the finest show places, for both tourists and antiquarians, in the world. Yet I actually saw an agitation in the local papers to modernize the town!

The Inca epoch is comparatively modern. While the exact date is doubtful, it is believed that this empire did not rise to power until about the tenth century, A.D. Its founder is the legendary Manco Capac with his sister-wife, Mama-Occllo, of whom it is alleged that they were sent to earth by the Sun, the Father of Mankind, and that they bore a golden staff, with instructions to found an empire wherever the staff should sink. They cast the staff in all directions until at last it sank in the Huancuari Hill, two leagues south-east of Cuzco. Then followed the reign of fourteen Inca emperors, who governed, on the whole, both wisely and well, and pushed their conquests until the larger part of South America was under their control.

Much has been written to prove that Solomon's ships came to the Amazonian region of South America for gold, silver, timber and the like, for the erection of the Temple; and Ophir, Parvaim and Tardschisch—places mentioned in the Bible—are said to have been located there. I offer no opinion as to the truth of this supposition, but one fact is certain—it is that Keshua, the language of the Incas, has many words similar to those in the Greek, Hebrew and Hindustani languages. There are over five hundred words

of identical meaning in Keshua and in Hindustani, while many Keshua words have been found in Egyptian writings and hieroglyphics.

In the year 1533 the Incas were conquered by Pizarro, then in his sixty-third year, and by his handful of adventurers whom the unfortunate Incas believed to be gods because they rode horses, animals which the Incas had never seen before. From that date up to the year 1821 the power of the Spaniards remained unbroken.

So enthralled were we with our sight-seeing that a whole week elapsed before we started to think seriously of preparing for our journey. The first essential was to buy mules.

"Si, Señor," we were told, "quite easy."

"What price?" we asked.

"£30 to £40!" I knew that a fair price would have been £20 to £30, but *gringos* are always considered fair game.

After a week, during which we seemed to get "no forrader," we decided to go to La Maquina, which is sixty miles from Cuzco, so as to have a look at the interesting ruins of Machu-Pichu. La Maquina was then the farthest point on the new railway line which was being built from Cuzco to Santa Ana, and there we ran across a man who made the interesting suggestion that we could reach our destination by way of the rivers Urubamba and Ucayali to Tambo, from which place we could get a launch to Iquitos. This idea appealed to us both as a very much more pleasant way of travelling than riding inefficient and very expensive mules over hundreds of miles of rough country. We had pleasant dreams of floating down broad rivers in peace and tranquillity. So we arranged with a muleteer to have mules ready for us in a week to take us to a place named Rosalina, from where, we were assured, we could obtain a canoe and Indians who knew the river.

None of our Peruvian friends could understand why anyone in his senses should wish to make the journey either by mule or by river when it would have been so much quicker and easier to take train to the coast at Mollendo, boat to Guayaquil, then another train to Quito. By some we were assured that we should never be able to get through

by river. Others said they thought it could be done, yet, in point of fact, not one of them knew what they were talking about. Indeed, I doubt if any of them had ever set eyes upon Peru's two greatest rivers.

We returned to Cuzco on December 4th. I at once set to work to purchase muzzle-loading guns, powder, shot and caps, small knives and machetes, cheap jewellery, coloured handkerchiefs, looking-glasses, fishing-hooks and the like for the purpose of bartering with the wild Indians to take us down the river. These Indians are among the few remaining people in the world among whom money is of no value. In selecting these goods we were greatly helped by two missionary friends, Mr. and Mrs. Jardine, and one of their congregation named Flores.

CHAPTER XI

THE JUMPING-OFF PLACE

BEFORE we left Cuzco we heard many tales of buried treasure. A *panadero*—bread maker—who occupied one of the old houses, left suddenly and later wrote to friends from Europe, where he was living in luxury. There is also a story of the local authorities having found treasure in the Plaza de Armas. Up at the fortress of Sacsahuaman many tunnels pierce the rocks, which are supposed to lead to subterranean treasure chambers, but the entrances have now been closed because a number of people lost their lives exploring them.

Years ago a party of six men went down the tunnel called the Chincana. Three days later one only returned, carrying an ear of corn beautifully made of pure gold, but either from fright or privation he was unable to speak, and two days later he died without giving any explanation of what had happened. It seems incomprehensible that the authorities do not send down a properly equipped search party instead of prosaically closing up the place. The curious fact is that Cuzco is one of the very few Inca towns in which no burial place has been found. It is quite possible that this Chincana tunnel may lead to it.

One of the best South American treasure stories is to be found in a footnote in Prescott's *Conquest of Peru*. Quoting from a Spanish author, he says : " It is a well authenticated report and generally received that there is a secret hall in the fortress of Cuzco, where an immense treasure is concealed, consisting of the statues of all the Incas, wrought in gold. A lady is still living, Dona Maria de Esquivel, the wife of the last Inca, who has visited this hall, and I have heard her relate the way in which she was carried to see it. Don Carlos, the lady's husband, did not maintain a style of living becoming his high rank. Dona Maria

reproached him, declaring that she had been deceived into marrying a poor Indian under the lofty title of Lord or Inca. She said this so frequently that one night Don Carlos exclaimed: "Lady, do you wish to know whether I am rich or poor? You shall see that no lord nor king in the world has a larger treasure than I have." Then, covering her eyes with a handkerchief, he made her turn round two or three times, and, taking her by the hand, led her a short distance before he removed the bandage. On opening her eyes what was her amazement! She had not gone more than two hundred paces, and descended a short flight of steps, and she now found herself in a large quadrangular hall, where, ranged on benches round the walls, she beheld the statues of the Incas, each of the size of a boy of twelve years old, all of massive gold. She also saw many vessels of gold and silver. "In fact," she said, "it was one of the most magnificent treasures in the whole world."

On December 12th we were ready to leave. We were not sorry, for living at so great a height for a period of eight months on end had begun to affect our nerves so that we both slept badly. The heads of the mission, Mr. and Mrs. Jardine, told me that they were expected to spend at least a month of their holidays on the coast, either at Mollendo or Lima. The latter, however, was too expensive for them, while the air of Arequipa is so charged with electricity in the dry season that it very soon affects the nerves.

We were lucky enough to take the first passenger train to be run to La Maquina, which has now been renamed Machu Picchu. It was here that we had arranged to pick up our mules. The freight train, which was all that had been running so far, not only had no regular schedule, but charged double first-class fares in order to discourage passengers. There is also a regulation that live stock must be accompanied, so the unfortunate *haciendero* must not only pay for his animals, but also double first-class fare for his *peones*. The line is being built by the Peruvian Government to Santa Ana, which has now changed its name to Quillabamba—"The Plain of the Moon." The rails run alongside the river Vilcanota, which joins the Urubamba at La Maquina. This red, rushing torrent is amply

sufficient to supply electric power to railways, factories and lighting for miles around. It is strange that no use has been made of it, especially since wood and coal are both quite costly.

The seventy miles to La Maquina takes six hours. The climb out of Cuzco is exceptionally steep. Every few hundred yards the train is run into a cul-de-sac and reverses up the higher gradient. There are many Inca remains along the sides of the line, including the fortress of Ollantaitambo, which is another marvel of masonry. The enormous stones must have been brought from the top of the opposite mountain and carried across the river, but how this was done, with the means at the disposal of those ancient builders, is a complete mystery. Two stones which lie a short distance from the town are known as Las Piedras Cansadas—The Tired Stones. The larger measures twenty feet by fifteen by six feet six inches, the other nine feet by eight by seven feet eight. When excavating under them large wooden levers were found. Ollantaitambo was besieged many times and served as the refuge for Manco Inca when he fled from the Spaniards. Of the two stone entrances to the fortress only one remains, and this was originally closed by a huge boulder. Through this a hole had been cut sufficiently large for the passage of a man on his hands and knees.

For miles on either side of the line can be seen Inca terraces for cultivation, running from the river up the mountain sides and in places the old road is still visible, but now mostly covered with sweet-smelling yellow broom and white cactus. The air became warmer and the scenery more tropical as we approached La Maquina, which stands at a height of six thousand feet. To my astonishment a large board announced " Hotel Ferro-Carril de Santa Ana." This was nailed to a structure of rough poles three or four inches apart, with a galvanized roof, held down by heavy logs. Inside was a room into which new beds and mattresses were being carried, and the pole walls were tacked round with butter-muslin. We were pleasantly surprised. We were the first guests. The hotel had been hurriedly got ready for the arrival of the first passenger train.

That night, about eight o'clock, when we were just thinking of turning in, there was a sudden crackle of Chinese crackers, and the proprietor, his wife, several relations and the railway officials, trooped on to the verandah, which also served as the dining-room, and announced that they were about to celebrate the inauguration of the Hotel. They courteously invited us to participate.

Three small bottles of champagne were opened and a few drops handed round to the score of assembled guests. There were four *compadres*—a sort of Godfather to the Hotel—two of whom were musicians. These played the mandolin and guitar, very separately tuned. All four had overtrained for the occasion. They were quite beyond speech, so the proprietor had to wish himself, on their behalf, all the luck, prosperity, etc., on this enormously important occasion. Then dancing started and beer began to flow. The orchestra was replaced by a gramophone. The six lady guests sat on a bench at one side of the room. Four of them were matrons, with children denoting the years they had been married, and in the intervals of dancing they industriously fed the younger infants.

The men on the other side of the room nodded off one by one, their sub-conscious minds wakening them each time the beer came round. They were a mixed lot, principally railway officials engaged on the construction work and all camped in pole huts. There were Americans, Russians, Dutch, French, and a one-eyed Alsatian. The latter, clad in disreputable rags, was sixty-one years of age ; he spoke eight languages fluently and had been sailor, prospector, miner, teacher of languages, etc., in all parts of the world—a regular old-timer, who quite cheerfully admitted that he could have been a rich man had he only been able to resist drink.

" Anyway, we can't all be angels," he said, " and I've kept clean."

There was something about this bundle of rags, known to all and sundry as Charlie, that impressed one he spoke the truth.

On the train journey I had learned of another odd Peruvian regulation. I was carrying a hunting-knife in my

belt, and two Guardias Civiles noticed this and pointed out to me that it was necessary to obtain a permit. No one, they said, was allowed to carry a knife with a blade more than two and a half inches in length, and mine was six inches. The knife was examined with great interest by all the passengers in the crowded compartment, while I felt like "Jack the Ripper"! Incidentally, no permit is required for machetes which have two-foot blades and are murderous weapons.

Peruvians of the class we encountered, have an insatiable curiosity to know all about your business. They bluntly ask where you have come from, where you are going and, above all, why! I got so sick of one of these questioners that I told him I travelled in rat poison! It is quite beyond their comprehension that anyone should go into the interior for amusement. They are convinced that there must be some ulterior motive, looking for oil, minerals, or spying for the British Government.

In this hilly part of the country everything of interest entails climbing, and to reach the ruins of the ancient Machu-Picchu there is a very steep climb of two thousand feet. The path runs first through the damp and slippery undergrowth of the forest, then up a corkscrew trail which leads to the main approach of three or four hundred granite steps, on one side of which are wells and reservoirs—the water channels cut deep in the virgin rock. It is a city of granite bleached white with age, and at a distance looks as though it were built of marble, a veritable Pompeii perched on an almost inaccessible spur of the mountain.

The first known discoverer of Machu-Picchu was an English prospector named Franklin, who explored it during the 'eighties of the last century. In 1911 a Yale scientific expedition, under Dr. Hiram Bingham, visited the place and uncovered more than three hundred houses and many streets and stairways. No one has yet been able to calculate its age, but it is certain that it was a pre-Inca settlement and must have held at one time over three thousand inhabitants. It was hurriedly abandoned as dead were left unburied. A possible reason for this sudden exodus is that an earthquake dried up the water supply. It has



Machu-Picchu perched high in the mountains



Machu-Picchu

undoubtedly been inhabited since its early days, for there are remains of mud and stone buildings which were constructed at a later date.

It is reputed to have been a place of refuge from the Spaniards on account of its inaccessible and nearly impregnable position. It is pretty certain that the Spaniards must have known of it, though there is no evidence that they ever went there. There are very perfect remains of a large temple built of hewn stones of enormous size. This temple has three large windows, a very unusual feature in Inca architecture, also an observatory. Machu-Picchu contains the most interesting and perfect remains of prehistoric architecture known in South America, and the authorities have installed a caretaker, and are taking steps for the preservation of this marvellous monument. Our guide told us that there are several other towns of about the same size and period buried in the forests of the mountains, but that none of these has, so far, been explored or excavated.

Everyone was most interested in our journey, but no two people seemed to have the same idea concerning it. An official of the district declared that the passage of the rivers was quite impossible at this time of the year, on account of the rains. Others agreed that if we escaped drowning and starvation, Indian arrows would finish our trip for us. It was like listening to the advice of friends when one wants to buy a car. We were aware that an Englishwoman, an Evangelist, had got through as far as Iquitos. She had started with heavy trunks that were lost when the canoe upset on the first day, consequently she had no goods to trade with the Indians and nearly starved. For more than a month she had no matches and suffered incredible hardships, yet dogged determination got her through. Her journey took her ten months.

Two months before our arrival some Frenchmen brought a couple of light canoes to the river and, armed with rifles, revolvers and cinema cameras, started for Iquitos. They would not listen to advice or allow Indians to pilot them. The result was that they only got two kilometres from their starting-point before they upset, and after another try,

with the same result, gave up and went home. We were specially warned against a fierce *hacíendero*, whose mother was a savage, and who, it was said, had shot his father. We were told that we should have to pass through his domain. We obtained a letter of introduction to him and trusted that he would not hold us up to ransom, or anything equally unpleasant.

CHAPTER XII

MANNERS AND CUSTOMS

THE mules which we had ordered had not materialized and enquiries elicited that the muleteer was in hiding from the police. He had shot a man. This meant further delay, for it was the busy season and all the mule owners had contracts for bringing in loads of coca leaf. Thanks, however, to the good offices of an ex-deputy who invited us to stay at his *hacienda*, we managed to secure two riding mules and set off for his place, leaving our kit to follow later.

The average pace of mules on these so-called roads is rarely as much as three miles, and it took us fully ten hours to ride the twenty-seven miles to our half-way house, the *Hacienda Santa Rosa*. Arrived there at six o'clock, we requested permission to sleep. "Yes, but there are no beds," was the curt reply. An enquiry for forage for our tired animals was met with *No hay* (there is none)—and we waited patiently for some food until half-past eight, when a cup of coffee was doled out to us. We asked if they would sell us some bread. Again *No hay*. Visitors, apparently, were not encouraged. Angry and very hungry, we wrapped ourselves in our *ponchos* and with our saddles for pillows, dossed down on the slate floor of the verandah. Before dawn we saddled up our mules in the corral and were just about to ride off when the owner of the place came out to enquire why we were in such a hurry to leave. I told him I was in a hurry to write about the hospitality of the *Hacienda Santa Rosa* before memory of it grew cold.

About a league further on we came upon a road-side store where we made an excellent breakfast of sardines, bread and beer, and at ten o'clock we reached the *Hacienda Uchumayo*, one of those belonging to our ex-deputy friend, where, much to our relief, we were received in a

most hospitable manner. After lunch fresh horses were found for us and we rode round the property, which covers an area of about ten square miles. We saw sugar-cane fields, date palms, mangos, cocoa and coffee plantations. There were also oranges, lemons, paw-paws and avocada pears. A considerable area was planted in coca, in rows that looked like privet hedges. Coca is one of the staple industries of this part of Peru. The leaves are picked green and laid in the sun on specially made slate pavements in the court-yard of the *hacienda;* the drying process takes about three hours.

The drug cocaine is prepared from the coca and all the Indians, women as well as men, keep a wad of coca leaves in their cheeks all day long. It does not seem to have any ill-effect on their health, for their longevity is extraordinary, and I should fancy that the proportion of centenarians among these Indians is not exceeded in any other part of the world. Their teeth are wonderfully white and good, and it seems probable that their use of coca is no worse than chewing-gum or tobacco and perhaps better than smoking. It is a custom that has existed time out of mind. I have seen silver masks of the Inca period, plainly showing the coca wad bulging in the cheek. It is only when the Indians exist without food, on coca and the crude spirit distilled from sugar-cane, that the habit undermines their constitution.

The chief difficulty in working these Peruvian haciendas is that of labour, especially now when the *peones* can get fairly well-paid work on the railway construction. The practice in this part of the country is for an owner to give the Indians as much land as they can cultivate, according to the size of their family, on which they build themselves a house. The condition is that two of the family shall each work ten days a month for the owner. For the rest of the time they are at liberty to raise their own crops. This sounds good until one learns that half of these crops have to go to the landowner. If the Indians do not work, Peruvian law allows them to be expelled from the property, as they do not pay any rent. There were about a hundred families working on the " Uchumayo " property.

That night we again slept on a slate floor, but since mattresses and skins were provided, we were much more comfortable than on the previous night. There is very little furniture even in large and rich *haciendas,* and travellers are supposed to bring their own beds and blankets. We were temporarily without these, for our kit had not yet arrived.

On the following morning, that of December 18th, we mounted our mules again and rode on to our host's other *hacienda* at Quillabamba. Quillabamba is on comparatively low ground, being only three thousand five hundred feet above sea-level. It is shown on the map as Santa Ana, but it can hardly be called a town, for all it consists of is a large *hacienda,* a dilapidated church and a few mud huts. When the railway project was first mooted, and it was decided that Santa Ana should be the rail head, it was not considered advisable that the sub-Prefect and other Government officials should reside on land which was under the jurisdiction of the *haciendas,* so with great difficulty a plot of land was purchased close by, some six hundred by four hundred metres in area. There the new town was started about thirty years ago and christened Quillabamba. The railway has not yet reached it. At the time of our visit it consisted of a street of one-storied mud buildings with roofs of straw or galvanized iron. Not one house had a window, only big double doors, open on to the street.

The water supply flows in a gutter down the centre of the street, and the quantity, as well as the quality, is variable. Sanitation simply does not exist except for the very useful vultures which may be seen perched on every roof. Furniture is almost completely lacking. It seemed to us to consist mainly of old packing-cases, empty bottles and home-made beds. There are usually two or three beds in the same room, and beneath them guinea pigs, fowls and other domestic animals find safe retreat. The dirt was appalling, cockroaches swarmed, but though it was nearly midsummer there were surprisingly few flies, and no mosquitoes. There were, however, hordes of other insects. In the daytime the women sit on the doorsteps pulling out those

white things that children have in their heads—not teeth. The women have a polite habit of raising their straw hats to greet a stranger. Incidentally, they blow their noses on their skirts! Perhaps owing to the general filth that extraordinary disease, known as *overo*, was common. This turns the black pigment of the Indian skin white, with the extraordinary effect that the victim becomes piebald.

The sale of salt, matches and tobacco is controlled by the State; matches cost threepence a box. As for tobacco, since this plant grows wild, the tax is generally evaded. Even sugar is now heavily taxed. Meters to show the output of alcohol are being compulsorily installed by the Government—at the producer's expense. The German who installed these machines, offered to bet a month's salary that they could not be tampered with. An engineer I know told me that he could do it with the greatest ease, but would make more money from the manufacturers than by taking the bet.

Bread is baked by families who rent the use of an oven at certain hours. It does not taste bad, but must contain at least twenty-five per cent of cockroaches. Those damned cockroaches! They ate the leather in our hats, our saddles, our papers, our books, even the films of my negatives.

The Dominican padres have a large Mission Station where they educate some two hundred boys and girls, including children of the semi-civilized Machiguenguas who live in the surrounding forests. These children are nicely dressed. On Sundays you see the little girls in white smocks with blue silk sashes. I could not help wondering how long the effects of the education would last when the youngsters returned to their parents and relations, who still smear their faces with paint and whom fashions do not trouble. I found, however, that the so-called savages are much cleaner in their habits than the Keshuas who inhabit the village.

Butter and jam are not used. Our host, the ex-Deputy, told me that he had heard that we in Europe had the habit of smearing grease on slices of bread. "Why do you do that?" he asked. I felt like the man who showed his daughter a cow in a field and she enquired "Why?"

Arrived at one of these *haciendas* after a long and dusty ride, no one dreams of offering water for a wash, and one takes one's own soap and towel to the nearest stream.

This Quillabamba *hacienda* was smaller than the one at Uchumayo, and principally devoted to the cultivation of cocoa, which requires better and flatter ground than either coca or coffee. The house was large and rambling, a great dirty barrack where the inhabitants were content to pig it in a way that would scandalize the poorest peasant in Europe. The owner was immensely proud of two lavatory basins which he had just installed with running water, one in his bedroom, the other in the salon! These, with two occasional tables, three garden chairs, and a gramophone with records of the Inca period, constituted the entire furniture. Carpets are unknown in this part of the world. A large verandah, at least fifty yards from the kitchen, served as dining-room, a bank built of hardened mud formed a divan on one side, the dining-chairs were wooden forms. The guest bedroom was on the ground floor at the side of the main entrance. There was a broad stone staircase, while an open passage ran through the house by which calves, goats, fowls and ducks were driven at night into a corral behind. This guest room had two windows provided with iron bars, but without glass. Two ramshackle beds with unspeakable mattresses were the only furniture provided. There were no wash-basins, curtains, soap, towels or any other convenience. Except that there was no means of fastening the door, our room would have made an excellent prison cell.

Everyone goes to bed at half-past eight or nine and is up at dawn, when breakfast is served, of black coffee with bread hard as ship's biscuits. Lunch comes at half-past eleven—good soup, though always very greasy and most hotly flavoured with red chillies, rice and meat, sometimes fruit. A favourite fruit is the Avocada pear, which is not sweet, but makes an excellent salad. For lunch and dinner table-napkins and a tablecloth were provided, which were a feast in themselves. Table-napkins may be used for the fingers, but the tablecloth is always used for the mouth.

One priceless menu was Soup—Avocada pears—Soup—Hot milk.

Our host, the ex-Deputy, had visited Lima and Cuzco, but it could not be said that he had profited much by what he had seen there. He had been married three times. His first bride was his uncle's widow, whose death gave him possession of the two *haciendas,* his second had been a go-ahead woman who manœuvred him into politics. The third, a lady who gave him social position in Cuzco. At the time of our arrival he was living with a wall-eyed lady, daughter of a neighbouring ranch-owner, at whose house he had hidden when proscribed by the Government in 1924 for revolution. His third wife was dutifully looking after his accumulated children in Cuzco. His first was buried in the vegetable garden.

The same knife and fork are used throughout the meal. When everybody is served the host mutters the Spanish equivalent of " Go to it " ; conversation ceases, though the silence is not unbroken ! The lady or ladies of a *hacienda* are kept very much in the background, usually appearing only for meals. The spitting habit is fearfully prevalent among this class in Peru—men and women both addicts and adepts.

After three days our baggage arrived and we seized the opportunity to take a room in the village, much to our host's surprise, and a little to his disgust. I think he liked us and liked talking to us, and it was rather a feather in his cap to have two *gringos* staying with him. We, however, made the excuse that we might have to remain in Quillabamba a long time and could not further trespass on his hospitality. Although I have told the truth about his way of living, it is only fair to say that he was quite hospitable, and nice to us, and that, even after we had left his house, he constantly invited us to meals and to look at the newspapers.

Our room, the only one we could get, was mud, pure and simple, and cost us one *sole*—1s. 8d. a week. We soused it with creosote, which improved it a little, and fed at a place where food was cooked—one could not call it a restaurant—for a fixed sum each a day. This feeding-place was run by

a motherly old woman known as "*La Tchaska*" ("Morning Star" in Keshua), a name given to her on account of the bright eyes of her youth.

We were objects of great curiosity in the village, and of speculation. We were taken for Americans, Germans, Yugo-Slavs and Italians, but never once for Englishmen who are almost an unknown species in this part of the world.

CHAPTER XIII

ADVENTURES OF A MISSIONARY

PERUVIAN curiosity does not confine itself to conversation. We were stared at as though we were monstrosities and each day a crowd gathered round the door. This was more especially the case when I was engaged in the witchcraft of photography. Our visitors politely said "*Buenos días, Señor,*" then silently fixed every movement with an incandescent stare. Every one of them firmly believed that we were attached to some secret scientific mission. The plain truth that we were travelling for our own interest and amusement was quite beyond their comprehension.

Few of these Indians speak Spanish, but their Keshua language is full of expressive and picturesque phrases. One would not suspect it to see them and observe their habits. The women marry young, about fifteen or sixteen, and after that their only business is hard work and producing babies. Some of these Indians wear clothes of distinctive colour and shape, which are relics of the old Spanish feudal days when they belonged to the household of some Spanish grandee. The small boys, I noticed, were extraordinarily good in nursing and looking after smaller brothers and sisters.

In Quillabamba we were fortunate enough to meet with Herr Christian Bües, an ex-official road engineer and surveyor of archæology. He was supposed to be employed by the Peruvian Government, but called himself ex-official because his salary so seldom materialized. Bües was a remarkable man, conversant with many subjects in many languages, yet how he kept up to date, after having lived in this forgotten village for twelve years with only two visits to Cuzco during the whole of that time, is a mystery. He had made many finds of new species of animals and

plants, and was correspondent of some of the foremost American Scientific Societies. The kindest man alive, his inherent good nature forced him to place his knowledge at the services of all and sundry. He entirely lacked any particle of business instinct. Following his usual custom, he at once stopped his own work on our arrival and made us free of his own maps and notes, as well as those of the Lima Geographical Society ; he even provided us with paper and ink with which to copy them, things which were unpurchasable in Quillabamba. In every way he gave us all the help in his power.

There had been no map of Peru to be obtained in Cuzco, so the help of Herr Bües was invaluable. More than that, he was the only man we had met in Peru who said honestly " Up to this point, I know, but after that, I do not." He took us to interview the Dominican Padres, who have two other Mission Stations, one at Chirumbia and the other at Coribeni. These are both on the river, but at no great distance. The Fathers knew very little that was definite, beyond these two places. That was our great difficulty, that we could find no one who had actually been far down the river. There was one point on which all agreed, that the trip would be extremely difficult since the " Time of the Waters "—that is to say, the floods,—was much earlier this year and the river was coming down more heavily than usual. One of the dangers most constantly mentioned was that from tree trunks washed down from the tributaries.

We learned that there were only two men who could get us down the first part of the way. One was named Sotomayor, but with him we were not anxious to deal, since we had heard of his inhuman treatment of Mrs. Bertha Cox, the English Evangelist of whom I shall have more to say later. Another reason was that his Machiguenguas Indians had recently had a fight with those of Morales, the other man, a fight in which several had been killed on each side. This second man, Morales, was agent for Pereyra and Landa, who are the kings of the river in this section, and have a rubber post far down the river, at Malanquiato.

Chadwick and I, very tired of being unable to get definite

first-hand information, made up our minds that Chadwick should go to see Morales at Cocchayoc. The reason was that we should have to look to Pereyra and Landa for transport beyond Malanquiato. Further difficulties arose when we announced this decision. We were assured that Morales was wilder than any of his savages, and that he slipped away whenever any stranger approached his dwelling. By a lucky chance we fell in with a relative of his, named Adiles, who, for a consideration of five Peruvian pounds, agreed to get Chadwick an interview with Morales, and do what he could to induce him to send us down the river with his Indians as far as Malanquiato.

Just then we remembered that Pereyra was the " bandit " against whom we had been warned at La Maquina, and to whom I had the letter of introduction. Chadwick left with Adiles two days after Christmas, riding a mule provided by the ex-deputy. This concession was due to my having made him a present of my Rolls razor, to which he had taken a great fancy.

While Chadwick was away I gleaned more details about Mrs. Cox's trip down the river, also about the French expedition. Later, on arrival at Iquitos, I was privileged to read Mrs. Cox's own version of her voyage, a most interesting and original document. Though undoubtedly a fanatic —she claims to hear the direct voice of God—Mrs. Cox is without doubt a very courageous and determined old lady. At the age of sixty-five she had a " call " to go and spread the Gospel in the " Pongos," as she expresses it, and against the advice, and without the financial backing of the Evangelists in Cuzco, she set off on a journey which few white men, let alone an elderly woman, had ever previously attempted. She started with an absurd amount of luggage, and wasted much time because the muleteer flatly refused to load it. Finally she reduced it and arrived at Sotomayor's place in June, 1928. He treated her abominably, refusing to sell her food, and that in a country where food is not sold, but given.

After being practically starved for seven months, and having to keep her fire going day and night because she had no matches, and living under a strip of canvas with her

boxes for a bed, a semi-civilized Indian took pity on her and sold her twenty-five pounds of rice. He also made her the present of a hen. This hen laid eggs for eighteen days, then, as Mrs. Cox quaintly puts it, " wished motherhood," and raised a brood of chickens. During her long wait the Dominican Bishop of Quillabamba came to see Mrs. Cox and offered her thirty *soles* a month to work among the Indian woman. She, however, refused.

On one occasion Sotomayor insisted on having a silk dress from the poor lady, in exchange for a cup of coffee. Mrs. Cox boldly told him that God would surely punish him for his cruelty, and the very next day one of his mules was killed by a jaguar. This " Divine vengeance " thoroughly frightened Sotomayor and he sold her a canoe at the exorbitant price of fifteen pounds. Just then a Mexican and a Czecho-Slovakian arrived on the scene. These men were orchid hunters and wished to go down river, so they and Mrs. Cox joined forces.

Mrs. Cox gave the people who had treated her so abominably most of her chickens, in return for which they stole her dog and followed the party for some hours down through the forests along the river bank, in the belief and hope that the canoe would upset and that they would be able to salve and steal the cargo. On the second day after the start the Czecho-Slav tried to get rid of his two companions by throwing off the tow rope from the bank just as the others in the canoe were entering a dangerous rapid. The result was that the canoe upset and everything was lost. The Mexican and Mrs. Cox managed to scramble ashore, but Mrs. Cox cut her hand to the bone by falling against a machete as the canoe upset. In her written account she refers to the man who had tried to murder her as " demon possessed."

Their property floating down the river was seen by Pereyra's Indians, and Pereyra sent out a search party which rescued them when they were on the very point of starvation. Peyrera provided another canoe and sent them on their way to Iquitos. Mrs. Cox declares that she was greatly rewarded for all her hardships, for the young Mexican became a convert to Evangelism. The only box

that was salved by the expectant Indians was found by them to contain nothing but Bibles!

So much for Mrs. Cox. I may as well add here the story of the French fiasco, a story which, as may be imagined, did not tend to cheer me much. In the previous October, five Frenchmen under a certain Captain Bournisien, had arrived in Cuzco with two light canoes, quite unsuitable for Peruvian rivers, and much talk to the effect that they were going to make a journey to Iquitos, thence down the Amazon and other rivers to Buenos Aires; perhaps there was too much boasting. Certainly difficulties arose and three members of the expedition returned to France. The canoes and equipment were brought to La Maquina by rail and thence by man-power to Quillabamba. Here Señor Landa, Herr Bües, the Bishop and others warned Captain Bournisien that a passage of the river was not merely dangerous, but utterly impossible for those who did not know it. They were, in fact, plain in telling them that such an attempt was equivalent to suicide. I will quote here from a letter which Landa wrote to Bournisien.

"The River Urubamba has a very steep fall from Quillabamba to Pongo de Mainique, and there are one hundred and thirty known bad places, without counting the tributaries, which are always to be feared on account of the whirlpools and currents they form. Worse than any part is the bad section of Sirialo with its rapids, one of which has a fall of thirty feet. If one is not very skilful one is liable to lose, not only the canoe, but one's life, in this spot. And from Pongo de Mainique—in case one gets past Sirialo in safety—there is a stretch of three leagues of bad places from Samiereto to Portado de Tonquini."

But the gallant Captain thought otherwise, and in spite of warning, insisted on setting off down the river. His canoe overturned before he had covered two kilometres. Next day the second canoe set off with exactly the same result. It upset and the crew of three had a very narrow escape from drowning. Still unconvinced, Captain Bournisien then decided that the next attempt should be made from a point lower down the river, that is, from Coribeni; but that he, personally, would go round by Lima and

rejoin the expedition either at Iquitos or Tambo, places which he could reach by mule and launch. With this idea in view he attempted to make a contract with Malleux, one of his own men, to bring the two canoes and all the equipment, with the help of a couple of Indians, to the mouth of the Tambo, promising him a bonus of one thousand francs if he reached this spot by December 18th.

He was to allow Malleux the use of the arms and ammunition, and the food supplies which consisted of forty pounds of sugar and salt, and five pounds of chocolate. He offered him the munificent sum of four *soles* (six shillings and eightpence) to buy extra provisions for a journey of something more than six hundred miles! Malleux, however, had sense enough to refuse this magnificent opportunity of death by starvation, and on the following day the Captain sold one of the canoes, leaving the other to be looked after, then departed for Lima. Arrived there he occupied himself in writing articles to *La Prensa* of Buenos Aires, which were copied in *El Commercio* of Cuzco, disparaging not only the members of his expedition, but also others who had gone far out of their way to give him help.

I may mention that Landa offered to transport the whole expedition and to supply them with food, to a navigable spot below Pongo de Mainique, for a sum equivalent to £40, but the Captain haughtily told him that he was "too commercial" and the offer was withdrawn. I append here copies of the contracts offered by Monsieur Bournisien, which seem worthy of inclusion:

"ANDRÉ BOURNISIEN,
Civil Engineer,
20 Rue St. Nicolas,
Rouen.

CORIBENI,
October 23rd, 1928.

Monsieur Malleux, Member of the Bournisien Mission.
(supplementary to those already given).

If, on December 1st, I am not at the mouth of the Tambo, and no orders have arrived there; you must go on in the direction of Iquitos, *without going farther than Massisea*, where, in order not to lose time, I will join you by the launch which runs there. I have put in a fourth sack for balance—

the third I have filled with things that would be of no service to you, and which are very valuable.

Mosquito Nets	Gramophone and records	1 pr. Boots
1 Casserole	1 Water Cask	1 Iron Ration
Acetylene Head Lamp	1 Tin	2 Blue Overalls

(signed)

ANDRÉ BOURNISIEN.

Coribeni to Tambo	120	Leagues
Tambo to Massisea	80	,,
	200	,,

or 600 miles."

"MISSION DES PÈRES DOMINICAINS DE CORIBENI, PERU.

MONSIEUR ARMAND MALLEUX
(Member of the Mission Bournisien).

It is agreed between us that I leave Coribeni to-day to go to the mouth of the Tambo, passing by way of Lima, and I give you the following instructions. You at once get in touch with the Indian Baldez, who is bringing the canoes to Coribeni, inform him that it is understood that he will stay in my employ for the rest of the voyage if his work is satisfactory—arrange with him that he is to have 30 *soles* for bringing the canoes to Coribeni and 100 *soles* to divide with the Indian Casabianca (if he comes) when he has brought the canoes to the mouth of the Tambo. The Fathers at Coribeni have orders to deliver the equipment to you when the boats arrive at the Mission Station, but not in any other case. It is understood that all the equipment remains my sole property, and that you must not dispose of it for any reason except to help the Expedition to Tambo.

The food and ammunition are entirely for your use. You must not in any case pass the mouth of the Tambo; orders will be sent to the local authorities in case I am not able to get there.

It is understood that if I find you at the mouth of the Tambo with the canoes and equipment I will, when we

reach Iquitos, immediately pay you the sum of 1000 francs (one thousand francs).

Made in duplicate at Coribeni, Oct. 22nd, 1928.

(signed)

ANDRE BOURNISIEN.

List of food for the Expedition—

20 lbs. Rice 20 lbs. Salt. 5 lbs. Chocolate."

CHAPTER XIV

THE "TIME OF THE WATERS"

VERY little notice is taken of Christmas in these parts, but for New Year there is feasting which takes the shape of a great roasting of pigs. This starts at midnight on New Year's Eve and is the excuse for drinking immense quantities of *caña* made from sugar cane, and *chicha*. The latter drink is made up of divers ingredients, some very vile tasting and intoxicating, often of maize chewed by women in the same way that *kava* is brewed in the Southern Pacific. Another sort is made from wheatmeal flour boiled in water and slightly fermented. This latter drink was supplied by our "restaurant" and, mixed with a little sugar, made an excellent thirst-quenching drink. There was beer to be had, but carriage made it very expensive. It was one and eightpence per bottle and was always warm because ice was unobtainable.

We had been keeping some expensive Salami de Milano sausage as emergency rations for the river trip. To my disgust I discovered that the abominable cockroaches had got at it and riddled it. It was impossible to get rid of these pests. Constantly spraying our quarters with creosote troubled them very little.

On the last day of 1928 Chadwick returned from Quillabamba and told me that he found Morales more civilized than many of the people whom he had met on the road. Morales had received him hospitably and given him a good deal of information. "Yes," he had said, "I could get you through to Landa and Pereyra, but the question is whether they can get you down by river below the bad rapids of Pongo de Mainique. The river is very high, and I do not know the state of the old forest trail, or whether it is passable. I think, therefore, that it would be better for

you to wait in Quillabamba until I can get information whether Pereyra can get you through. It may be that you will have to wait until the floods subside. In the meantime I will send your letters through to him and let you know when I can get his reply."

Chadwick spent two nights with Morales, who cordially invited us to come and stay with him as long as we wished. He said we could find both shooting and fishing. We decided to take Morales' advice and stayed on at Quillabamba. The rain-clouds hung on the mountains, the river was still in flood, and any attempt to go forward would be useless. The rain was all around us but did not fall so much in Quillabamba itself. Idma, a village only nine miles away in the hills, is said to be the wettest place in Peru. They told us that it rained there every day throughout the year.

So we had to possess ourselves in patience in this last place on earth, where a cinema is unheard of and every inhabitant is in bed by half-past eight. Candles were the only light, and our neighbours used to wait for us to come in from our supper in order to get a light. Matches, a State monopoly, are an expensive luxury.

The Carnival, which lasts four days, seems to be the only break which these people enjoy in their long year of monotony. Officially it started on February 10th, but there were no signs of gaiety except that some of the children were playing with paper "serpentines." On the 11th, however, as we sat playing a game of cards with two of the Marconi engineers, the house was suddenly invaded by a motley horde of men, women and children armed with bags of starch, and within ten seconds the room which we had so carefully cleaned that morning was covered with the beastly stuff. Incidentally, it was in our hair and eyes and down our necks. Next morning the shops were selling rubber balls and egg-shells filled with water. It was no use going warily. The spirit of carnival was abroad. Innocent-looking old women would suddenly plaster the back of one's neck with a horrible mixture of starch and water!

On the last day the starch, the eggs and water balls proved too tame and the whole population turned out armed with buckets, basins and any other articles, some

very frankly domestic, that would hold water. Both men and women were impartially ducked in the narrow stream that runs down the centre of the streets. All entered thoroughly into the fun. I saw a sergeant of police, the Government Officials, even their wives, being ducked, and they took it in quite good part.

While waiting at Quillabamba a Czecho-Slovakian who spoke English, turned up and wanted to join us, since he was anxious to get to Iquitos. His only clothing was a ragged shirt, a pair of blue overalls and dilapidated boots. Neither of us liked the look of the man, and we put him off by being vague as to our plans. After he had hung about for a week, he told me that he was setting off alone, as he was certain that a white man could go anywhere an Indian could. So off he started with an outfit which consisted of a big knife, needle and thread, a small tin of tobacco, some *Yuca* and, for some extraordinary reason which none of us could fathom, a penny packet of tomato seeds!

We heard later that this man reached Rosalina, the Mission Station at Coribeni, after a very hard journey, and stayed there until the Padres gently, but firmly, got rid of him. He was most abusive to them when they refused to send him on, which they were unable to do, but they gave him from their scanty stores sufficient food to get him back to Quillabamba. What happened to him afterwards I cannot say.

It was difficult to wile away the weary hours of waiting. Among other occupations, I made myself two packs of Patience cards (none being procurable in the village), out of the brown cardboard in which my films were wrapped. The hearts and diamonds were coloured with juice squeezed from the berries of the *achiote*. Black ink sufficed for the other two.

An old farmer, who owns land on both sides of the Urumbamba river, told me that he had been very much troubled by "cookies" (white ants), which ate his coca trees, and showed me where, two months previously, he had smoked out a nest with sulphur. At the time his *peones* were working on the far side of the river, and they called him over to show him the sulphur smoke coming out

through the mouth of a tunnel that the ants must have made under the river. This tunnel was at least one hundred and thirty metres long, an amazing engineering feat for a creature the size of an ant!

The *cicadas*, a kind of grasshopper, or cricket, sing in the banana trees, and if they get too excited, burst their tummies with their song. This reminds me of another so-called traveller's tale—that lizards' tails come off when in danger of capture, yet both are true. Castor oil plants grow wild in great luxuriance, but the castor oil industry is closed down on account of taxation. Now with the increased use of the oil for cars and aeroplanes, it should be worth restarting, but the trouble is in these Latin-American countries that, if an industry starts to go ahead, it is immediately taxed out of existence. The process of extraction is quite a simple one. The seeds are crushed in a mill, the resulting oil is heated and the impurities skimmed off, then it is ready for use.

One of the worst pests of South America is the "jigger," a detestable little insect that burrows under the toe-nails where it deposits a ball of eggs. At Sacambaya the "jigger" was a terrible plague. If one's blood is in bad condition the "jigger" causes horrible sores. The only way of being safe is to examine one's feet constantly, and, if a burrow is discovered, carefully to extract the ball of eggs with a needle. A little disinfectant and the clean hole heals up rapidly.

While waiting for Chadwick I started photographing types. The whole village demanded free copies, so in self-defence I started to make a small charge. Very soon I found that my photographs did not please my customers though, to my own eyes, they did not appear too bad. After a time I discovered that none of these people cared a damn what they looked like so long as their faces appeared white. My professional predecessor had been clever enough to obtain this result by retouching with light red!

The Peruvian Post and Telegraph, which the Marconi Company took over in 1921, are very unsafe and uncertain. Letters take eight days from Cuzco, a distance of one hundred and fifty miles. One is not allowed to enclose

money in a letter, and if there is an enclosure which excites the postman's curiosity, he inserts a cleft stick through the ungummed part of the envelope, rolls up the contents, and examines them. It is ten to one against the letter ever being replaced.

The province of Convencion, in which Quillabamba stands, is distinctly revolutionary. Small wonder, for the taxes are extortionate. The taxed ones grumble, but add enough to the prices of their commodities to not only cover the extra tax, but make extra profit. They said that President Leguia had unconstitutionally voted himself into power for eight years, and that he considered himself Primavero and Mussolini rolled into one, but there is no doubt that he saved the country the constant unrest of elections. A very real cause of complaint was that the tax money all went to the aggrandisement of Lima, while all through the back country there are millions of acres of rich soil waiting to be developed until roads are built. The law is that every man must do a certain number of days' work yearly on the roads, or else pay a fine, but since this fine was collected in stamps which emanated from Lima, that money also reverted to the capital. It is obvious that motor roads are the chief requisite of the country, and that they would be far more useful than railways, but in this country of graft, nothing useful gets done. Graft, graft ! The official tax collectors get fifteen per cent on the money they collect. The young men employed are only paid three to four Peruvian pounds a month, a salary which none could live on, yet all of them live well, have plenty of clothes and money for drink. It pays to be a collector in this country of taxes.

By March we were both heartily sick of Quillabamba, so we decided to leave and stay with Morales so as to be on the spot when the river subsided sufficiently for us to proceed by canoe, which we hoped would be the first week of April. We arranged to leave on March 13th. When one asks a Peruvian Indian at what hour he proposes to start on a journey, his invariable reply is "*A la primera hora, Señor,*" meaning at dawn, but is rarely as good as his word, so we were hardly surprised that the mules ordered at 7 a.m. did

not show up until ten o'clock. One of them, we were told, had strayed, but what, after all, was a trifle of three hours!

All the village turned out to say good-bye and wish us a good journey. The good "*La Tchaska*" brought us bread and a dozen hard-boiled eggs, others made us gifts of bread, fruit and bottles of *caña*. One little girl of five, named Clavia, to whom we had given empty match-boxes and the red wrapping-papers off the film packs, sobbed bitterly to see the last of us. Our cavalcade consisting of two Indians, two cargo mules, and ourselves, got away at eleven. We found a fairly good trail through the forest alongside the river. Just on the other side of the valley, only a couple of miles away, we saw the rain coming down in torrents, but we were lucky and had a dry journey the whole twenty-one miles to Echaraté, which is a large *hacienda* with a small village attached.

We reached the place at six and found our quarters fairly clean, but the bedroom was full of cockroaches and mice and, as usual, there was no other furniture except two very hard beds. We had to wash in the stream outside. The owner's wife was one of the prettiest women I had seen in Peru. Her manners, too, were an improvement on those of some of the Quillabamba ladies. She spat very little during meals. After making arrangements with our muleteer for a start in the morning "*a la primera hora*," and hoping to get on the road by eight o'clock, we went to bed rather saddle-sore after our three soft months in Quillabamba.

At seven in the morning the muleteer turned up to inform us that all four mules had got out of the corral and, presumably, taken the road home; the other man was sent after them, but it was eleven before he recaptured them and returned, which made it too late for any hope of reaching Cocchayoc that day, so we lunched at Echaraté and afterwards pushed on a two hours' ride to Subruyaco, where we were welcomed by Señor Gonzalez, to the best-kept *hacienda* which we had yet seen. Here we said a definite farewell to bread and potatoes, the place of which is taken by *yuca*.

Yuca is a root of the plant known as *mandioca* or *cassava*, and this root boiled or roasted is quite palatable. It has

a slight flavour of chestnut and is said to have eight times the nutritive value of wheat. The plant is a shrub which grows to a height of about six feet and from which comes the homely tapioca. Toasted and powdered, *yuca* will keep for years.

On this occasion we were careful to see the mules locked up in the corral by our host, so on the following morning we were able to get away by half-past seven, and hoped to reach our destination early in the afternoon. The trail was wet and very slippery. About one o'clock Chadwick stopped and looked round. " Somewhere here," he said, " we turn up the *questa* (steep hill) to Morales' place." A quarter of a mile further on we found a turn to the right. We struggled up it for two and a half hours, at times being forced to cut a way through the thick undergrowth. At last we came to an open space and rested a little. The mules were very exhausted. " Another ten minutes," said Chadwick hopefully, " the shack is just round the bend." But it was the wrong bend, and it took another hour and a half to repair our mistake. Then, it is true, we saw the shack, but it was still a good three miles distant, and between us and it was a deep *quebrada,* an utterly impassable ravine.

Since there was no possibility of reaching Morales' place that night, we made camp. Chadwick's mistake was easily understood, for the trails were all much overgrown since he had come out three months earlier. The way in which vegetation grows during the rainy season in the tropics must be seen to be believed. It was getting dark, the sky was heavily clouded and, since rain seemed imminent, I suggested to Chadwick that he should use the bivouac tent, which was hardly large enough for two, while I would doss down in my waterproof sleeping-bag. Sure enough, the rain came down in torrents and presently I awoke feeling horribly cold and clammy. I discovered I was lying in a pool of water. I pulled on my Wellington boots which had half an inch of water in them, and got my rubber *poncho,* rolled up in which I spent a very moist and miserable night. To add to my discomfort my boots were full of hard-biting red ants, known as " cookies." These made holes in my hat and ate through the laces of my riding-breeches. Bad

as they are, they are not a patch on the black variety, which would possibly have left me nothing to wear by morning.

The morning of March 16th found the rain still descending in torrents. A strong tot apiece of the *caña*, so thoughtfully provided by our good friends at Quillabamba, put a little warmth into our shivering bodies, yet we were two very wet and dispirited adventurers as we started on the last stage of our journey. It took us three and a half hours urging the tired mules up the slippery *questa* before we arrived at Morales' home some six thousand feet above sea-level. By this time the weather had improved and the sun was out. So were the insects. In places there were literally clouds of brilliantly coloured butterflies, and especially beautiful were the enormous blue ones (morphos), the wings of which are much used for ornamental work. There were also many bright green lizards about eighteen inches long, but we saw very little bird life. We had to pay our muleteer for an extra day, making in all £4 for the journey. Then we had some food, and after changing into dry things I slept for the rest of the afternoon. When I awoke I was horrified at Chadwick's appearance; his face looked about double its normal size, covered with bumps made by the bites of small but very poisonous blood-sucking yellow flies. I also had been bitten, but had not swollen up to the same extent. Fortunately, these detestable insects were abroad only in the daytime, and since there were few mosquitoes, we were left in peace at night.

The first thing I saw when I went outside was a very fine jaguar skin drying in the sun. It measured six feet four inches from tip to tip. Morales had killed it a few days earlier. These jaguars live in the mountains, from whence they come down and kill the cattle. When a kill is found it is poisoned with strychnine, and when Mr. Jaguar has eaten again and is feeling very unwell, he is despatched with a rifle at close quarters. There were two bullets through this one, one through the head, the other through the heart. Although I went out many times during our stay of seven weeks with Morales, in search of deer, wild boar and the like, I did not have the luck to see any big game, and only shot a few pigeons and parrots.

CHAPTER XV

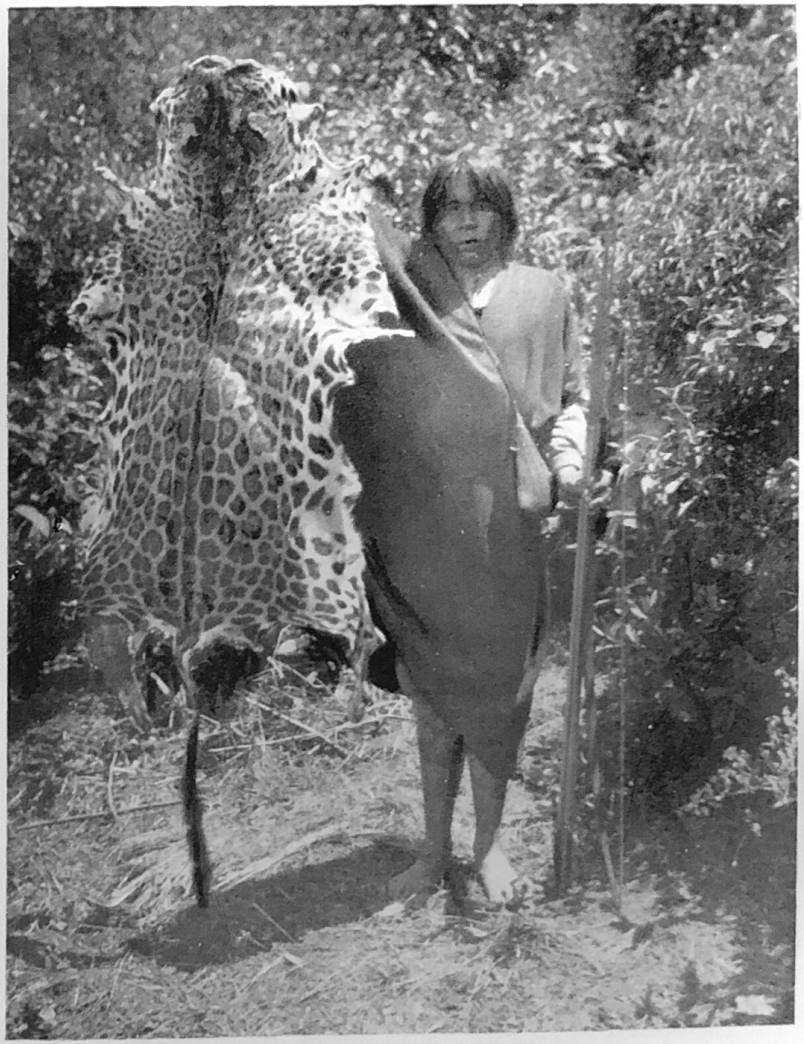
SEVEN WEEKS OF MISERY

MORALES' shack was a very dirty, dilapidated affair, built of mud and poles with a thatched roof which, fortunately, was weather-proof. It had only two rooms, one being his bedroom, the other the kitchen. There was also a verandah on which we slept and ate. Morales owned three thousand acres here at Cocchayoc, and five hundred acres on the other side of the river, at Rosalina. He grew coca, cocoa, maize, bananas and coffee. He also had about two hundred and fifty head of cattle. He was a young man of about thirty, with a half-Indian wife and two young children. He went about barefoot, and preferred to eat and sleep on the floor. Living on money which his father had left him, he was surrounded by a useless crowd of hangers-on with whom he drank, played cards, quarrelled, and meantime utterly neglected his farm, which might otherwise have paid him well.

The food was ghastly and there was never enough of it. It consisted chiefly of soups and *yuca*, but we never knew at what hour we should get it. The coffee or cocoa and milk were fairly regular, at half-past seven in the morning ; then we might get soup and *yuca* between nine and one and nothing else until six in the evening, when the dose was repeated. On festive occasions, when a pig was killed, we had enormous and improvident helpings. A bull killed for Easter was our *bête noire*. It went high and maggoty, but nobody seemed to take any notice, though it stank to Heaven, and huge pieces were served in the eternal soup, which we were forced to empty on the ground for the dogs. During these days we tightened up several notches in our belts, just existing on *yuca*. What we felt most seriously was the lack of fresh vegetables and fruit. We were in the awkward position of being guests, and were aware that it



Mariano Pereyra, whom at first I took to be a girl



A Machiguengua with the skin of a jaguar (“ tigre ”)

would only be through the help of our host that we should be able to continue our journey, so we had to be most careful to avoid offence. Although we had a small supply of tinned food we dared not break into it. This had to be kept for our trip down the river.

Morales' household consisted of semi-civilized Machiguengua men, women and children who slept in Morales' room, in the kitchen, or on the other half of the verandah. Others lived in huts on their *chacras*, or allotments, nearby. All these people were intensely interested in our belongings, more especially in the cameras and guns, so much so that we had to keep a pretty sharp eye on this part of our property.

From the top of the hill above Morales' place, where there is a big lagoon, we had a view of the ranges of mountains we should have to cross, if we did not go by river to get to Malanquiato. This was where Pereyra and Landa lived, and the distance was about seventy-five miles. Morales had no Indians who would make the journey, and since we should have required at least sixteen of them to carry our gear, for an Indian will not carry a greater load than twenty-five pounds, it was obvious we could not go that way, unless Landa came in. Morales told us that it was now five months since he had been in, although, normally, if the journey was possible, he came or sent monthly for supplies. By river the journey was one hundred and eighty miles, but though Morales had offered us a canoe, there were no paddlers to be had who knew the river. The whole of this stretch was full of rapids, whirlpools and bad places, while the river itself was still too high to attempt the passage, especially single-handed. Obviously, then, the only thing to be done was to possess ourselves in patience until Landa arrived, or until a messenger could be found to take our letters through to him.

This country is full of interest for the naturalist and botanist. There are plants which close up when touched, or even at a sudden noise, others that sting so severely that they produce temporary paralysis. These are sometimes planted for the purpose of catching plantation thieves. There are barks which have the property of opium, leaves

which give wonderful dyes, black, red, yellow, scarab beetles of iridescent colours, which can be mounted into brooches. There is another beetle which appears to have an arrangement for himself and his wife, that they shall burrow a tunnel and that the ants, meanwhile, shall feed them and carry away the loosened earth. There are cantharides beetles, and all kinds of fire-flies; there is *cuma*, a root which, if cut up and thrown into the water, intoxicates or kills the fish, and is often used by the Indians when dynamite is unobtainable. The leaf-cutting ants (Saubas), are interesting. These cut and use the leaves for the purpose of thatching the domes of their subterranean dwellings. These ants will empty a sack of rice or sugar in a single night, carrying it off grain by grain.

I had to give up smoking a pipe for some time because, unless it was perfectly dry, the native tobacco was too strong for me. The dampness of the atmosphere made it next to impossible to dry anything. Fortunately for me I was fond of the strong Peruvian cigarettes. On this border line of the "Never, Never Land" Keshua, Spanish and Machiguengua are the languages spoken. The different inflections and clicks in Keshua make it difficult for a stranger, yet it is simplicity itself compared with Machiguengua. Here are a couple of Machiguengua sentences:— "*Bechikakirorira magatiro, shintaroria magatiro, ipaita dioshi.* (I told them that God was the Maker of everything, the Creator of all.) *Biro pairo kametini pini; pimpakinara seguinachi manchakinchi.* (You are good; you will give me trousers and shirt.)" These examples I took from a Missionary booklet; of the two the Indian seems to have the more practical mind.

On March 24th Morales suggested a visit to the Dominican Mission at Chirumbia. It was a four hours' ride, first up hill over the mountain, then down a terrifically steep *questa*, ending up with a perilous passage across a narrow plank bridge over the River Chirumbia. The Mission was perched half-way up the steep hill opposite. We were welcomed by young Padre Henrique, and a lay brother. Dinner was served. Slices of roast wild boar, which was the greatest treat we had experienced for many

a long day, and afterwards the Padre held a service for Morales and the retinue of Indians whom he had brought with him. Then an old gramophone entertained us until bedtime. The Padre, who was educated and clean, had only arrived from Spain a year ago. He told me that only Spaniards held office in the more remote missions, but that the Dominicans in Cuzco and the towns are mostly Peruvians. He seemed to have become used to the loneliness, but was a little despondent over the slow progress the conversion business was making. We each had separate cubicles with clean beds and sheets, but we were all badly bitten by a very small form of gnat or mosquito with a proboscis that pierced like a needle.

Next morning we were on the trail at nine o'clock. Morales sent a runner ahead to prepare food at an Indian hut on his own land. There were constant halts for *chícha* and *caña*. Incidentally, the *chícha* is supposed to nullify the evil effects of the *caña*. The lunch at the hut was the usual supply of soup and *yuca*. Then, getting tired of these constant *copas*, Chadwick and I rode on ahead. Morales arrived two hours later, rather inebriated and inclined to be annoyed that we had gone on and left him. Presently, however, his mood changed to one of embarrassing affection for the *Ingleses*. His house, poor as it was, belonged to us and all its contents. He and his family would depart in the morning and leave it free. It was all wrong that we had to sleep on the verandah. His wife was our sister, we must bring our *cattrays* into his room. He would like to sleep at the side of his *Inglese* brothers.

Now Morales, his wife and the two children slept on skins on the floor and bundles of smelly *ponchos* covered various women and children at the other end of the room, so we tactfully, but very determinedly, extolled the delights of the verandah. We could not tell him to go to Hell, first, because we were his guests and there was nowhere else to go; secondly, because we had to rely entirely upon him to get us on. Later, Morales decided to continue the orgy at a friend's house. We very firmly refused to accompany him, so he mounted his unfortunate mule with his wife perched

in front and a fat Indian girl behind, then with his whole retinue rode off in the pouring rain. He arrived back early in the morning quite sober, but plastered with mud; the mule, it appeared, had fallen with its triple burden in the dark.

That day the Gobernadores of Echaraté and Chirumbia arrived, bringing large gourds of *caña*, and the next two days were spent playing cards (Casino), and consuming the liquor. The Gobernadores are unpaid officials who are supposed to see that the peones do their allotted day's work on the roads. The real object of their visit was to entice Morales to sell them a cow, but this he was reluctant to do since he was anxious to increase his herd, the only thing in which he appeared to take any real interest. They also wanted to see if we had any guns to sell, but we had to keep these to trade with Pereyra and Landa.

Casino, as played in Peru, seems to be quite a good game for two, three or four people, but the rules are very different from those of the English game. These people also play *Siete y media* (Seven and a half), a variety of *vingt-et-un*, in which each court card counts as a half and the two of spades is the Joker. You can draw as many cards as you like. They all play a flagrantly dishonest game and they deal to the right.

Easter was on March 30th. At half-past one a bell was tolled and Morales and his guests embraced us and wished us a happy Easter. We made him a present of a muzzle-loading gun, powder, caps and shot. About sixty Machiguenguas turned up, including two Pan-Pipe players, a man with a mandolin and one with a guitar. These did their best, but the only result was to make Easter hideous. Morales kept a dozen fighting-cocks and the music started them all crowing. The babies squalled, the parrots shrieked, the ancient gramophone groaned and the result was absolute babel.

All day long, from six in the morning, constant *copas* of *caña* and *chícha* circulated. The *caña* is served in a small liqueur glass, one for the entire company, and it is passed round in rotation. Truly a loving cup! A dance called the *Marinero* varied the proceedings. As

done in Peru, this is a very stupid handkerchief-dance, reminiscent of a poultry farm. Chadwick and I were called upon to perform. Neither of us had ever tried it before, but we succeeded in introducing several new and original features which much amused and delighted the company. Things got very alcoholic, and one old man performing a *pas seul*, managed to fall twice over the edge of the cliff and rolled down fifty feet, apparently without hurting himself in the slightest.

Easter is the time for christening, and the christening customs are quaint. A girl of five was to be christened, and, first, her hair was done up into four plaits representing the number of her God-parents. Next, two beer-bottles, each holding a flower, were placed upon a stool, and after each God-parent had snipped off a plait and laid it with a money offering on a plate, the rest of the assembly followed this example. Many of them could not afford more than ten or twenty cents, yet the total collection amounted to about thirty shillings.

Next morning, Easter Monday, all the guests departed. When Morales emerged from his room he stated he was tired and that he was going down to the river-side to rest. With him went all his family, many bottles of *chicha* and *caña*, musical instruments and guns. We were left in peace with a woman and a boy to look after us. It was Tuesday afternoon before he returned, and by his looks we strongly suspected that he had been continuing his Easter celebrations, not on the river-bank, but at some friend's house. Incidentally, he had taken dynamite, but we noticed that he had brought no fish. A pig was killed on his return. They cut the animal's throat and collected the blood in a calabash ; then they wetted the carcase, covered it with straw and set light to it to burn the hair off.

Time passed terribly slowly, a little shooting, many walks, and collecting butterflies. Our greatest trial was that we had nothing whatever to read except the Bible, Old and New Testaments, which our Evangelist friends in Cuzco had sent us.

Another fortnight passed. Nobody could understand why Landa had not sent or come in. The river had run

down considerably and was apparently navigable. We were both thoroughly fed up and Chadwick was talking of chucking it up. I confess that I felt very like it myself, but I suggested to him that if nothing transpired in a week's time we should buy a canoe and take our chance of getting down the river on our own. We told Morales of our intention, but he at once said it would mean certain death. Morales had never been down himself, and I thought the dangers and difficulties were probably greatly exaggerated. I determined to risk it. I could delay no longer. I had promised Sanders not to fail him if the Company should come out again, and he had suggested sailing from England about May 1st, so, in any case, we should be late, even if we cut the journey short at Iquitos.

Another annoyance was that we could get no news from home. It was impossible to send a cable from anywhere nearer than Cuzco, which was two hundred miles away, and a journey of at least five days. To go back was unthinkable. If we could only get into touch with Landa! Then, as luck had it, we heard of a man who had been over the mountain trail to Malanquiato twelve years previously, and we asked him if he would take a message to Landa. He was difficult to persuade, for the recent fighting between the Indians had made him nervous. In any case he flatly refused to go alone. When I had agreed to his taking a companion he persuaded a Machiguengua to accompany him. The price he asked was twelve *soles* for himself, and eight for his companion, in all £1 13s. 4d. for the return journey of one hundred and fifty miles over mountains and through rivers, cutting their way through the forests. We lent him a muzzle-loading gun and he started.

On April 21st there were very heavy rains in the morning. The clouds were heaviest in the direction of Malanquiato, and we feared that the floods might prevent the messenger from crossing the rivers, especially the Pachiri, which is wide as well as very swift. The man had told us that, in any case, he might be forced to make a raft of *balsa* wood to cross this river. Morales informed me that the mountains on the far side of the river are practically unexplored and that there are stories of big lagoons on the tops. In Peru

one frequently finds considerable sheets of water very high, in the hills. Another thing he said was, that the river Coribeni which, as I have already mentioned, means " River of Gold," runs yellow at certain times in the dry season. Of course, there is supposed to be gold, but in all parts of this country, as in Bolivia, it is the Indians who bring in these rumours, probably caused by sight of pyrites or mica.

The food grew worse and worse. April 21st was a hungry day with nine and a half hours wait between soups. On April 24th I managed to buy some mouldy bread and two pounds of cheese from a passing Indian. This was St. Mark's Day, the patron Saint of cattle. Morales said he would kill a bull in the morning. He had all the cattle gathered together and at dusk fixed up a big fly-sheet in the middle of the corral. Two camp fires were lighted and he passed the night there with mandolins, guitar, gramophone, *caña*, *chicha*, and his male and female retinue. We preferred our beds on the verandah. Next day the bull was killed and we had three heavy meals within two hours.

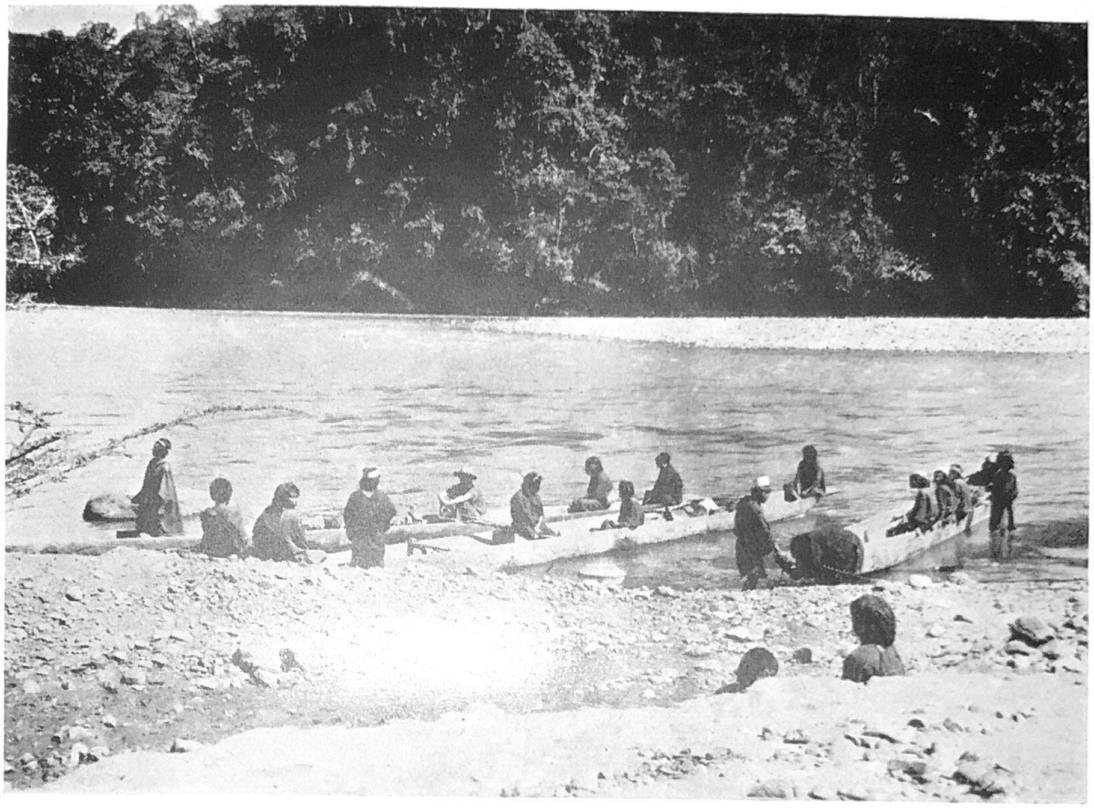
For days later there was no sign of the messenger, so we began to hope that he had got through. I went up the hill to take photographs of some Indian women engaged in weaving. One boiled me an egg and gave me a bit of *yuca*. One has to be hungry to appreciate the joy that food can give. On May 2nd here came our messenger bringing us cordial letters from Pereyra and Landa, saying they were sending *bogas* (paddlers) immediately. This was again a period of rotten meat which lasted out from day to day, but our bread and cheese helped to keep the wolf from the door, while a charitable hen had started laying eggs under my bed.

Joy of joys! On May 3rd five *bogas* arrived with six rubber sacks in which to pack our valuables. These would then float in case of the canoe overturning. The men were dressed in sack-shaped sleeveless tunics called *cushmas*, and their faces were daubed with *achiote*, a red dye. They carried bows and arrows and their only rations were dry and powdered *yuca*. Our letters of

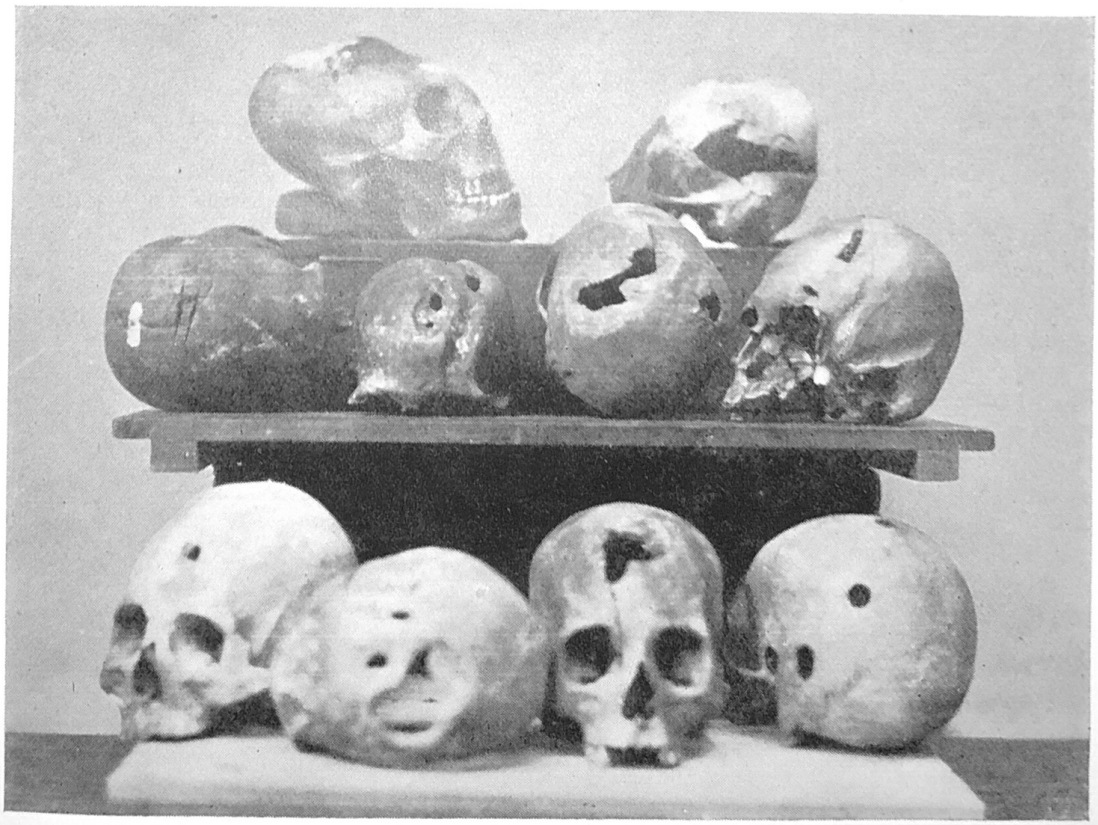
introduction had had an evident effect on Pereyra and Landa, who wrote that they hoped to prove to us that that there were still decent people to be found, even in the inaccessible mountains of Peru. In a letter to Morales they added that they would do everything in their power to make the journey of the " illustrious strangers, who had come from so far, a pleasant and safe one." They had sent their most reliable *bogas* and had given them most explicit instructions as to how we were to be looked after. I afterwards found that the head *boga* was Pereyra's son-in-law.

The relief of knowing that the interminable wait was over was intense, and we were greatly cheered to think that we had a chance of getting through where the Frenchmen and at least ninety per cent of other nationalities had failed. On May 4th, after making presents of small looking-glasses and handkerchiefs to Morales' people, we left Cocchayoc for Rosalina, Morales' property on the river. It was a two hours' walk downhill all the way, and we noticed traces of an Inca road which, I was told, was part of the old road to Iquitos. The river was about seventy yards wide and we crossed it in a canoe. Morales, accompanied by his usual retinue, came down to see us off. It was a good excuse for a drinking bout. On the plea of having to start early, we slipped off to bed, but Morales and his friends continued their debauch until early in the morning, when there was nothing left to drink. They had consumed twenty bottles of *caña* which had been intended for Pereyra and Landa. Our own stock of liquor I had fortunately stowed under my bed, but twice during the night I caught Indians crawling on hands and knees suspiciously near. I was glad to see that our paddlers took no part in the orgy. These men had examined the canoe which Morales had offered to lend us, but had decreed that it was too small and unsafe, so he had to offer the loan of his big one. Unfortunately, this required repairs which meant another day's delay.

This canoe was dug out of an immense trunk of mahogany, and was very heavy. It was no less than forty-six feet in length and two feet six inches in width. The sides were



On the way down the river to Malanquiato



Skulls found near Sacambaya showing trepanning, the top left purposely malformed in childhood

eighteen inches high and one and a half thick, and being nearly straight up and down, it looked more like a punt than a canoe, and was difficult to handle. Morales left in the morning. What a relief! What peace and quiet! We strolled round the cocoa plantation and found oranges, lemons and bananas. We had an enormous meal of *pâté de foie gras*, butter, which we had not tasted for four months, sardines, biscuits, tinned sausages and some spring onions which I had found in the deserted garden.

Our bogas were doing wonders with the canoe which had a large crack in it. Their only implements were machetes and some six-inch nails which I luckily happened to have with me. They cut battens to reinforce the sides and plugged the ugly crack with cotton wool soaked in a resinous gum, and over this nailed strips of wood. To do this they cut and split the nails and, having no hammer, drove them in with a stone. They also cut five new paddles with very large blades. These seemed to me enormously heavy. The result was a rough, but perfectly serviceable job, and by night all was ready for a start in the morning.

CHAPTER XVI

OFF AT LAST

WE got away at eight o'clock on the morning of May 6th. One *boga* knelt in the bow, two others knelt, or crouched, close behind him. The head *boga* and another were in the stern. The going at first was easy, the strong current carried us along at a smart pace and there were few rapids that presented difficulty. It rained hard for the first three hours, wetting us to the skin, since we were using our rubber *ponchos* to cover the bedding and luggage. The canoe still leaked a little so, after a while, we drew into the bank to bale out, and the men made a shelter for us by sticking enormous ten foot banana leaves into the mud.

At midday we stopped at a Machiguengua village, which consisted of a number of palm huts with little entrances no more than three feet in height. The men of the tribe were squatting under a thatched shelter. They were clad in dark red *cushmas*, their faces were elaborately painted and they had ropes of vegetable beads round their necks. Their hair, which they wore long, gave them a very effeminate appearance, and it was difficult to distinguish the men from the women until one discovered that the men always wore the stripes of their *cushmas* vertically and the women horizontally. Palm mats were laid for us to sit upon and the chief made us welcome. He wore a broad band of palm leaf round his head like a halo. This was a little askew, due, I fancy, to the effects of the *chicha* which the women were busy preparing in the background. He passed us chunks of dried meat, *yuca* and bananas, and gave our men as much *yuca* as they could carry for the journey.

Since we spoke no words of the Machiguengua language, and the Indians knew no Spanish, we were of necessity



Machiguengua warriors. The one in the centre looks like a Roman Emperor



Machiguengua ladies

very silent guests, but the Indians chatted away merrily among themselves. My wrist-watch was a source of much comment and probably my appearance also, since my trousers had given way at both knees and were held together with safety pins. Safety pins were here used only as decorations, and the Chief was delighted when I pinned a couple on his manly bosom. I had to do this for him for he did not understand the mechanism.

That night we camped at the head of the Sirialo Rapids, a notably bad stretch. One rapid has a fall of thirty feet. Within half an hour our men rigged up a very serviceable hut of poles fastened together with bark and roofed with palms and big banana leaves. One always camps on the sandy shores of the river as the forests run down to the banks and the jungle is too thick to penetrate. Next morning the first thing was to cut new lianas, the amazingly tough creepers which can be found in any quantity in these forests. Three lengths were tied to the bow of the canoe and two to the stern. Then we continued our journey. It was a day of rapids and bad places. Sometimes we let the canoe down inch by inch from the bank, hacking away the undergrowth and projecting branches before we could find passage, and often having to wade up to our armpits in the water. At other times the whole cargo would have to be taken out and the *bogas*, wading in the river, would carefully work the canoe down and round great projecting rocks. There was certainly no monotony. After a gentle glide down a quiet stretch of water a roar would warn us that rapids were near and we would suddenly catch sight of a long vista of white-crested waves stretched across the full breadth of the river.

The steersman would shout, the *bogas* stand up and take a quick glance. Then a sharp order and they dropped back into their places. In another minute we would be in the midst of a mass of seething, bubbling, swirling waters, the *bogas* paddling for dear life, grunting at each stroke. Their skill was amazing. At the foot of each rapid there is usually a whirlpool which must be taken at full speed. Paddling is strenuous until the calmer water beyond is reached. Twice we had narrow escapes when the canoe ran on to submerged

rocks, but in each case were lucky enough to slip off in time, with no worse mishap than shipping a deal of water.

The canoe was heavy and clumsy and needed a lot of exertion to keep it head on. Although the men had worked very hard and been wet through all day, when evening came they were still smiling and cheerful and asked me to dynamite some fish. I threw in a couple of sticks but without any result, then I went back into the bush with a gun and was lucky enough to shoot two turkeys, big handsome birds. With these and a few fish caught on a line, we made an excellent supper.

I saw the men slicing canes with their machetes, and picking out white grubs which they ate alive. I have usually been willing to " try anything once," but I did not try that time. These Indians also ate frogs and beetles, and I have watched them comb out their long hair, pick the insects off the comb, and chew them with infinite relish. They are good hunters, apart from the caterpillar and comb business, and it was seldom that they came back empty-handed from the forests. Usually a turkey, parrot or monkey had fallen to their bows and arrows, and they frequently brought in nuts and strange fruits quite unknown in Europe. At three in the afternoon, we pitched camp at the mouth of the River Quiteni, and it was a treat to get into dry things and eat one of the turkeys which we boiled in our tin wash-basin, as we had left the saucepan behind and had been unable to obtain any lard for frying at Cocchayoc.

The start on May 8th was made at seven o'clock, and very soon we came to a stretch of rapids so bad that everything had to be taken out of the canoe and portaged for a distance of a quarter of a mile. The river here was narrow and the rock rose sheer from the edges, making it very difficult to get footing to let the canoe down with the creeper ropes. I had an unsuccessful hunt for monkeys in the forest. Heavy rain began to fall at one o'clock and I was for making camp, but we found no suitable place until three, when we camped upon a deserted clearing with a big palm hut some thirty feet by twenty. Here we landed, got a couple of fires going, and were busy drying out our clothes. The men were getting used to us and started to

bring us tit-bits of food in their fingers. They also cracked nuts in their teeth for our benefit. After supper there was one small sardine left in the tin. The head *boga* picked it up and I saw him carefully divide it among the other four.

It was uncanny how the Indians guessed the time without watches, for next morning all was ready for our start exactly at seven o'clock. This day there were fewer rapids and we made good progress. At the mouth of the Rio Pachiri I was more lucky with dynamite. One stick brought up forty pounds weight of fish, of which one resembled a salmon and weighed over twenty pounds. A stone was tied to weight the cartridge and a very short piece of fuse used. The explosion stuns or kills any fish within a small radius. It is, of course, a very unsportsmanlike practice, since it usually kills many more fish than are needed, but it is a general custom on these rivers. Nor is one too scrupulous when the pangs of hunger gnaw, as often happens on journeys of this sort. Our *bogas* dived into the water and quickly collected the fish. If no dynamite is handy the Indians use a root called *cuma* or *barbasco*, which intoxicates or kills the fish.

Midday brought us to another Indian village, the first habitation we had seen for two days. It was a little way back from the bank and approached by a slippery bridge of tree trunks. The chief gave us generously of dried fish and *yuca*, and on leaving I presented him with a bottle of *caña*. He had several enormous swigs, then passed the remainder round to his friends. In less than two minutes the bottle was empty and the chief retired smiling happily.

After passing more rapids and whirlpools, but none of them very dangerous, we came to a place called Mantalo, where, in 1926, an earthquake had broken down the bank and thrown several large rocks into the river. Some of these had hieroglyphics on them which appeared to be of Inca origin, but were now nearly obliterated. This was another bad spot, which necessitated the portage of everything in the canoe for a distance of five hundred yards over precipitous rocks. Then the *bogas* shot down in the empty canoe. The current here ran at twelve or fifteen miles an hour.

Early in the afternoon we reached Malanquiato, of which the altitude is marked on the map as 420 metres. The distance from Rosalina was said to be one hundred and eighty miles, but, judging by the time taken, I do not think it can be more than one hundred and thirty-five miles. I might mention that this stretch has never been properly surveyed. From Rosalina we had dropped eight hundred feet or, roughly, six feet per mile. Malanquiato means "The Place of Snakes and Rushing Waters." It is a pleasant spot on a beautiful stretch of river, and is where Señores Pereyra and Landa lived with a number of Machiguengua families divided into tribes, each under their own chiefs. Señor Pereyra we found to be a kindly, courteous man of forty-five, who made us most welcome. His father, a Spaniard, married a Machiguengua woman of whom he is the son. Years ago, in a quarrel, he was unfortunate enough to kill his father, and this unhappy event gave him a bad name and has made him shun the haunts of civilized men ever since. He has taken Machiguengua wives, by one of whom he has two sons, boys of fourteen and eleven years of age. They are gentle, refined, and have manners that many European children might copy with advantage. They looked and bore themselves like little princes in their long black *cushmas*. It made me sad to think how they would probably deteriorate when they went to school and mixed with civilization. Later I wrote to Herr Bües in Quillabamba, and referring to Pereyra and his Indians who are alluded to as *los salvajes* (the savages), I said that the so-called "bandits and savages" were to be found in the towns and not in the mountains.

We stayed at Malanquiato for ten days, and I was able to see and learn much about the tribe and its customs. I could have had no better mentor than Pereyra. Although half Machiguengua himself, he still retains the traditions of the white man, and although his affection for his people is deep seated, he is not blind to their short-comings. They are happy, mirth-loving, irresponsible, honest folk, but unwarlike and not too fond of work. Their outlook on a future life is that it will be a very sombre affair, so they do what they can, according to their ideas, to make the

best of their present existence. Their industries, which are industries of necessity and not, therefore, very artistic, are basket work, crude pottery, weaving and string for fishing-lines and nets. The latter they make from green reeds split, washed and dried in the sun. The resulting fibres are rolled on their thighs or calves. Fish, *yuca*, and the birds and animals which they shoot with their bows and arrows, constitute their food.

It was strange to be in a place where there are no roads, horses, mules or cattle within miles. Pereyra at one time brought in forty head of cattle, but the vampire bats killed them all. I have heard it said that the bats will not attack cattle if there are goats among them, but I do not think there is any truth in this. There are also small vampire bats known as *murcielago-vampiros* which attack human beings in their sleep, sucking blood from the nose, ears, fingers and toes. Though I have met many people who have been bitten, and have been bitten myself, I have not heard of anyone who has awakened during the attack. It is believed that these creatures never make their onslaught until their victim is asleep, and that if several men are sleeping in the same room the attack is not made while any one of them remains awake. There is also an idea that the bat must inject some soporific which would explain why the puncture is not felt. This is also the theory of F. W. Up de Graff, who wrote that interesting book *The Head Hunters of the Amazon*, and several other naturalists with whom I have talked.

With animals the bats do not appear to take the same precautions. They usually go for the throat or for a spot between the vertebræ of the spine. Mules will get rid of them by rolling, but horses do not seem to think of this and must be covered with rugs at night. A mixture of creosote, garlic, camphor and red pepper is said to keep the pests away. Garlic, of course, was the old witches' recipe against vampires.

The Machiguenguas use bows five feet long, made from *chonta* wood which is black and very tough and strong. The arrows are made from a very light cane, the heads being of pointed and barbed wood for shooting fish, and

spear shape for shooting animals and birds. For birds, the plumage of which they do not wish to damage, they use an arrow-head which resembles a reel of cotton. I have seen one bring down a humming bird at forty feet. The Piros, another Indian tribe, made a curious type of arrow which whistles as it passes through the air. This they use for monkeys.

The Machiguengua chiefs, who are chosen by common consent, take two or three wives, but the rest of the men usually have only one. Living in this most inaccessible spot, they have come very little into contact with white men, especially since the rubber slump of 1914, but tales of the illtreatment of Indians by the rubber traders have spread among them and when we first arrived we were received with great reserve. Soon, however, partly because our habits had been favourably reported on by our *bogas*, and also because we were the guests of Pereyra, we were accepted in a most friendly spirit and, in the villages, were always offered food and *chica* by the chiefs. This is a sign of good will.

They are a very superstitious folk, full of fears of evil spirits and of night birds. The call of one particular bird is considered such an ill omen that they actually change the site of the village when it is heard. This is also done if any member of the community dies of fever or epidemic disease. In any case, they move to pastures new at least once in two years, which is useful and hygienic. With them a move is not a serious affair, for new huts can be erected in a day. They believe in the transmigration of souls into animals, and for this reason do not eat deer and certain other creatures. If they kill a tapir or other beast which is out of condition, they will not eat it because they think some soul has tormented it. Again a very hygienic precaution. They have no idols and, oddly enough, believe that the Moon is the father of the Sun. They are very modest and, as far as is known, have always worn their long *cushmas*, which are made by the women and dyed with *achiote*. Each man carries a small woven bag slung over the shoulder and filled with coca leaves which he chews constantly.

The men wear dried bird skins, jaguar claws and monkeys' teeth hanging down their backs, and the women hang similar ornaments from both shoulders. Many have a small round silver disc suspended from their noses and both men and women are fond of long necklaces made of coloured vegetable beads. On certain occasions head-dresses of yellow, green and scarlet parrot and toucan feathers are worn around their foreheads. Their faces are painted in various designs in black or red, some of them very elaborate.

On arriving at marriageable age the girls undergo a month's seclusion, during which they take a series of herbal purification baths, and have a kind of finishing course in weaving, and the domestic arts. Like most other savage tribes they are great believers in charms and love philtres, which the wise men and old women brew from herbs and strange ingredients. Strangely, they had no fear of the camera and enjoyed posing singly and in groups.

CHAPTER XVII

THE PLACE OF BEARS

PEREYRA'S partner, Landa, was a Cuban who had knocked about the world for many years before coming to rest in this remote spot. He had been a mechanic on the Rio Beni and had worked for Colonel Pedro Suarez, a connection of mine by marriage. Oddly enough he had also worked with the owner of the local pub at Bourne End where I lived in England. Landa had run out of cartridges for his 16-bore gun and as I had plenty, I was able to give him some. In return he insisted on presenting me with a number of beautiful bird skins, among which were toucans, *picaflores*, that is to say, humming birds, and some of the exquisite little *colibri*.

Pereyra told us that the lower river was malarial, so we started taking a daily dose of ten grains of quinine every evening at about seven o'clock. This precaution had proved most efficacious at Sacambaya where twenty-three white men and eighty Indians worked for eight months in a notoriously malarial spot without a single case of fever.

In the old days before the War, when rubber was a paying proposition, Machiguenguas found plenty of work in tapping the wild rubber trees and making the rubber into balls of about twenty-five pounds weight, which they traded to Pereyra for merchandise; but now the low price of rubber, added to the high cost of transport to the distant market, had completely killed the industry, and the Indians collected only sufficient for their own use in coating their *ponchos* and bags. So Pereyra and Landa had it in their minds to move and take all their people with them to a spot below the bad rapids of Pongo de Mainique. Here they would be nearer Tambo, to which place they could float a year's crop of rubber in one journey on *balsas* at very little cost. At present they had to take

it up-river to Rosalina and thence by train and mule to Cuzco.

Had Pereyra and Landa been rogues instead of the honest men they were, they could have held us up nicely and charged any sum they liked for helping us in our journey down river. Certainly we could go neither forwards nor backwards without their help. As it was, they were quite satisfied with the trade goods we had bought in Cuzco. These included: three muzzle-loading guns, three boxes of coloured cottons, sixty tins of gunpowder, twelve handkerchiefs (coloured), fifteen pounds shot, five machetes, fish hooks, and one adze. These had cost us about £17, but we set them down as being worth £25 on account of transport. We were both glad to be rid of the weight and bulk of them. I had fully expected that Pereyra and Landa would require cash besides these goods, for it would take fully ten days to get us to Tambo, and twenty to twenty-five days for the return against the stream. This included sending the men to bring us from Rosalina. At Tambo we were told we could find a launch on which we could make the rest of the journey to the Amazon.

Pongo de Mainique, which means " The Place of Bears," is the worst pass on the river. On the morning of our departure, which was May 15th, a Machiguengua came running breathlessly with news that there had been a fresh landslide from the steep bank by a rapid, and that it would be impossible for us to pass. Like all men who live very solitary lives, Pereyra and Landa were distinctly nervy. They were very frightened of smashing up the canoes, and we had some difficulty in persuading them to start. In the end they consented and we got away. Pereyra was to accompany us for the first two days, but Landa decided to travel with us as far as Tambo, for it was thought that the Piros, who inhabited the banks of the lower river, might possibly attack the Machiguenguas on the return journey if there were no white man with them.

All the women came down to the bank to see their men off, and after farewells and presents to the chiefs, we set off in two big canoes manned by twenty-three Machiguenguas. We had rifles, guns, bows and arrows, food and all

our kit. Mariano and Justo, Pereyra's two boys, with whom we had become great friends, sobbed bitterly at the parting. I begged Pereyra to allow them to come part of the way, but he refused, saying that Mariano had to take his place during his absence.

That first day we encountered several ugly rapids, one where the current was so swift that the canoes had to be hauled ashore and dragged down over the rocks on improvised rollers made of tree trunks. We camped early at Jogiato, the entrance to the Pongo de Mainique, and sent off one canoe with six of the most reliable *bogas* to investigate the landslide. They returned just before dusk and, much to our relief, reported that they thought we should be able to get through. Next morning half an hour's paddling brought us to the head of the rapid. The approach is a magnificent sight. Gaunt rocks rise sheer on either side with great white waves rising high against them. The actual rapid is only about four hundred yards long. It is very narrow, the pass being only eighty yards wide. The river thunders over huge boulders in a mass of foam and spray at a speed which I should estimate at nearly thirty miles an hour. The fall is thirty to forty feet. It took fully five hours to unload the two canoes and carry their cargoes over the precipitous rocks. Owing to the new landslide it was very difficult to get a footing and, in some places, we were forced to cut a new path through the heavy bush. Then the empty canoes were let down the rapid with long *lianas*, ten *bogas* hanging on to each of them. Except that one canoe got swamped twice, there was no mishap, and we embarked again at the foot of the rapid, very thankful we had got through the most dangerous part of the journey in safety.

Fifteen minutes later we reached the "Gates of the Pongo," which mark the end of the Cordilleras. At either side of the river the mountains form a narrow ridge coming in at right angles. They resemble old battlemented castle walls, a most curious and unusual freak of Nature. It was a great relief to be able to see almost to the horizon again, after being cooped up so long in the mountains. An hour's paddling and the shooting of some small rapids brought

us to a place called Rosari Incaveni, where we made an early camp to give the *bogas* a well-deserved rest. At night it began to drizzle and by morning the rain had become a steady downpour, so we decided to stay where we were.

It was not to prove a dull day, in spite of the weather. Early in the morning we saw a stag swimming the river. We waited until it was close to the bank, and shot it dead, but it sank like a stone, and we saw no more of it. This was a pity because we were a large family to feed, twenty-three Indians and four of ourselves. The Machiguenguas killed a couple of small turtles and dug up many of their eggs out of the sand. There were about twenty-two in each nest. The eggs are small, about the size of a ping-pong ball, perfectly round and good to eat, but no amount of boiling will cause the white to set. One of our huntsmen came upon a *tigrillo*, a sort of leopard-cat which had just killed a small animal called a *picaro*, and despatched it with a couple of arrows.

Landa threw out a line which he tied to a good-sized log on the bank. Half an hour later the log suddenly disappeared. When I saw a fish which they brought in later, I was not surprised at the disappearance of the log. It was a *sungaro*, weighing ninety-five pounds, a form of cat or mud fish with an enormous mouth, and whiskers sticking out on either side. It was about four and a half feet long. They told me, however, that it was by no means a large specimen, for these fish run up to about three hundred pounds. We got several others, including *pacus* and *charaguas*, which gave us plenty of food for the next day or two.

We sampled *chonta*, which is the raw pith of a kind of palm. It had a distinct flavour of lemon and was good, but it would have been improved by oil and vinegar, luxuries which, unfortunately, we lacked. By this time our supplies of tinned food were running very short and we were mainly dependent on gun and line for "eats." We had plenty of the strong native tobacco—contraband at that—but had no cigarette papers, and were reduced to using old newspapers. Of sugar we still had a supply,

carried in bottles. It had been squeezed direct from the cane and was of the same consistency and taste as honey.

May 18th gave us a dull morning, but fortunately the rain had stopped and we got away at eight o'clock. The river widened to three hundred yards, but the current was still very swift, running at seven to eight miles an hour. We shot several rapids and encountered some very bad whirlpools. At half-past nine we reached the mouth of the Rio Timpia where live another tribe of Machiguenguas known as *Italianos* because they used to work for an Italian. The customary three blasts were sounded on the cane siren to give warning of our approach, but as the canoes drew near, the Indians disappeared into the forest like rabbits. Pereyra was very much afraid that they might start shooting poisoned arrows, under the impression that we were Piros or white men on a slave-trading expedition, and I began to feel sorry that I had not taken the advice of a picturesque Italian, who had wanted to make the same trip, and who had suggested to me that I should obtain a replica of the thick hide waistcoat which he had made for himself as a protection against arrows. A messenger was sent after the fugitives who induced a few of them to return. We told them to send their chief over to see us and went across the river to camp. I visited their village where I saw some gorgeously coloured parrots, also a baby tapir of which they had made a pet. It was about three weeks old and perfectly tame. It had black and white striped fur which it loses as it grows up.

The chief arrived in the morning and had a long palaver with Pereyra. It lasted two hours, during which time they discussed crops, weather, the sicknesses and deaths of their respective peoples, and many other subjects before they came to the point, which was to hire a pilot to take us on to Tambo. To this the chief agreed and the price was arranged at one machete and ten small looking-glasses. Then we said a regretful good-bye to Pereyra, who was returning to Malanquiato, and with Landa, seven *bogas*, the pilot and a big cargo of bananas and *yuca*, set off in the other canoe. We camped at the mouth of the Rio Ababonuato, and the Machiguenguas shot a couple of

small monkeys and some fish with their bows and arrows. I found monkeys excellent eating, while bananas boiled, fried or roasted were pleasant, as well as nourishing. This was the first day of our trip that we had not been wet through either by rain, wading in the river, or getting half-swamped in the canoe.

On the morning of May 20th, we embarked at seven o'clock and paddled down a magnificent reach, broad, deep, with wide stretches of sandy shores and splendid forests on either side. Now that we had left the mountains we had come to a region where animal life was much more plentiful. We saw a number of *capiguaras*, a kind of water pig, deer and tapirs. We also passed big colonies of monkeys, which chattered furiously at us from the tall tree-tops. I greatly regretted not having brought a rifle. Landa had one, but was, unfortunately, very short of ammunition. He had not brought it for game shooting, but only for use in case of attack.

Birds were quite abundant. We saw parrots, king-fishers, toucans with their enormous beaks, duck, ibis, and a beautiful bird, all pink, which, I think, must have been a species of stork or flamingo. The tracks of jaguars were to be seen on the sandy surface of most of the *playa's*, and we found mussels which the Indians said were not eatable, but of which they used the sharp-edged shells for the purpose of trimming their hair.

We were now in the country of the Piro Indians, but since they had nearly all left to go further into the interior, there was no need for Pereyra to worry about the danger of their molesting us. Once we saw inhabited huts, but as usual, the occupants ran away as we approached. This was a nuisance because we needed fresh supplies of *yuca* to feed our men. When the homesteads are abandoned, animals, especially wild pigs, come down and soon devour the old plantations of *cassava*. In point of fact, the Piros grow little *yuca*, their main crop is bananas.

Trees of enormous size had fallen into the river and their dead branches were a danger to navigation. There were any number of floating logs, of which we had to be very careful. The river was constantly changing. In some

places were long, straight reaches, in others it twisted like a snake. There were many islands, large and small, and the width varied from one to three miles. Sometimes the current was sluggish and sometimes very swift. As an example, just after passing Mishagua we covered fifteen miles in an hour and a half. At Quiriquitini and Marmioli, we again encountered rapids and whirlpools, then after nine hours' paddling, with only half an hour's stop to hunt a tapir, we came to the spot where the Rio Huitiricayo runs into the main stream, and where we camped opposite the huts of some Piros who, of course, fled. It had been a beautiful sunny day, and was followed by a night of perfect moonlight, and we dropped asleep to a chorus of deep-throated frogs. On these clear nights the dew was so heavy that everything left uncovered was soaked by morning.

At dawn some of our Indians went out with their bows and arrows and returned triumphant with three splendid turkeys. On this day we found the river much straighter, with long, wide reaches, while the country was flatter than any which we had seen since starting. We saw two stags, but not near enough to get a shot, and made a midday stop at the mouth of the Rio Miaria, where there used to be a Mission. This, however, had completely disappeared. At half-past three we made camp on an island at the mouth of another tributary. Sand is beautifully clean to camp on, but it gets into every particle of food. It may be good for the digestion. Let us hope it was.

Next morning, very heavy mists hung over the river, which delayed our start until half-past seven. We had put out night-lines the previous evening. The hooks of both of them were bent or broken, so the fish must have been enormous, for the hooks were large and of good steel. We met a white man going up-stream, who landed and gave us a wonderful breakfast of wild pig, fish, *yuca*, rice and other delicacies. He told us he was going to " bring his Indians down to work " ; but I learned later that his real object was to try and buy Indian children who would be forced to work for him for nothing until they grew up. When they did, they would find themselves heavily in his

debt for clothes and the like, and be frightened into remaining slaves for life. Slavery is illegal, but there is a lot of this kind of slave-trading done *sub rosa*.

Our map, made by Robledo in 1911, was of very little use. This river changes from year to year, old islands disappear and new ones form, while the banks themselves alter widely. We were now beginning to near civilization, so animal life grew more scarce, but many birds called in the forests, and I saw some otters on the bank. Late that afternoon we encountered two anæmic-looking Englishmen. They were brothers, who spoke bad Spanish and worse English. They told us they were Evangelists and they carried a large stock of Bibles. But how they proposed to set about converting people who could neither speak nor read their language, I was unable to find out. I warned them that they would find it difficult to even see any Indians and that they stood an excellent chance of starving. But my remarks on the difficulties only served to add fuel to their enthusiasm, which had been started by Mrs. Bertha Cox's story of her trip. It was perfectly obvious that they knew nothing whatever about the country or conditions to which they were going, yet should they come back alive they will consider themselves martyrs, while other folk might well dub them fools for going off without knowledge or preparation for their task.

You can rent the soul of an Indian for a machete, renew the lease with a shirt, and for a further term with a pair of trousers, but if no more rent is forthcoming, Mr. Indian goes on his way having lost nothing. If the Missionaries —and some do—commenced by teaching a trade such as carpentry, whereby the Indian can earn, by his work, the gewgaws his soul covets, they would have much more chance of keeping in touch with him and, perhaps, of making converts.

Towards half-past five we found ourselves amid a number of small islands and camped on one of these; this archipelago is called Carrasco. Next morning, after an early start, we arrived by eight o'clock at the mouth of the Rio Sepa where, a year ago, the Peruvian Government had granted two and a half million acres to a Polish Emigration Company on

condition that they placed three hundred families of no less than three members each, during the first year, and brought out a thousand families in fifteen years. The whole business was thoroughly mismanaged and the wrong type of emigrant imported. When we called to try and buy *yuca*, we were informed that there was none left of the fifty acres that had been planted less than a year ago. The place was in the hands of an Austrian caretaker, with two Indians to assist him. The wretched emigrants had left. A pitiful waste of someone's money, and a sad ending of an enterprise that had started with a great flourish of trumpets.

There is much valuable and interesting timber in the forests bordering this part of the river ; *itauba*, from which the best canoes are made, which is hard and as durable as teak ; *balsa* wood in enormous quantities, which is only half the weight of cork. From this the rafts known as *balsas* are made, and the wood is also valuable for insulation purposes and for pulp. Then there is the " Wood of the Cross ", which is yellow with dark stains and delightfully aromatic. This is much in demand for cabinet work and in the making of religious relics. Besides these, cedar, oak and mahogany are abundant.

That evening we reached a spot only ten kilometres from Tambo, where we stayed the night with Señor Ribas, and pushing off early next morning, reached Tambo by nine o'clock. Ribas had told us that the launch, *La Libertad*, had left six days earlier, but that he believed that Vargas was sending his own launch up to Tambo. On arrival we found we had missed that by two days and were told that probably *La Libertad* would not return for two or three months. We seemed to be experts at missing things. Launches take three weeks from Iquitos to Tambo, against the stream, and the fare is twelve pounds, but the return journey is made in half the time and the fare is proportionately lower.

Tambo consists of a few scattered houses occupied by *Chacreros*, who grow rice, cotton and coffee, and an Adventist Mission. We called on Gonzalo, who is the big noise of the district, and he gave us a room. It is the

hospitable custom of this country to give travellers a place to sleep and food without any charge, where there is no hotel. The house was three hundred yards from the river. The Indians shouldered our baggage, then paused, talking among themselves in low voices. By signs I found that what was worrying them was that they did not consider it safe to enter a territory where there were strange white men, and many Piros, so I had to escort them to our quarters, then back again to the canoe.

They clustered round like frightened chickens. Landa, although he had lived with them for seven years, did not speak a word of their language, and did not seem to inspire them with confidence. They probably sensed that he was a very nervous man. We were sorry, indeed, to part with these picturesque souls who had brought us through many dangers over a distance of more than three hundred and fifty miles. We made them presents of tins of gun-powder, looking-glasses and knives; and the chief *boga*, who was wearing a headdress made of red and silver paper from a film pack, received, in addition, a gaudy pair of ear-rings at which he beamed delightedly. To Landa we gave four pounds to provide him with necessities for the return trip, such as sugar, *caña*, coffee and tobacco, and also to show our appreciation of the way in which he and Pereyra had treated us. His return journey against the stream would take him at least three or four weeks. Gonzalo said he could arrange to send us on in a canoe as far as Cumaria, a three days' journey. There, so he said, we should be certain to get a launch in a day or two.

CHAPTER XVIII

GONZALO THE ROBBER

CAMPOS, Chamas, Amawakas and Piros are the principal tribes in this part of Peru. Some of them had a distinctly Asiatic cast of countenance, and might have been mistaken for Chinese. Strangely enough, their dialects are analogous to Chinese, and a Chinaman picks up the language in a very short time. The faces and legs of Piro women were painted in very intricate designs in black, and their hands and ankles were smeared with the same stuff, which is supposed to have the property of keeping off mosquitoes. The result is that at a little distance they appear to be wearing gloves and very elaborate stockings. These people make quite good pottery, which is painted in remarkably artistic designs.

Next morning Gonzalo told us the canoe was ready. I asked how much for the hire and he replied softly, "*Doce*" (twelve). Thinking he meant twelve *soles*, I handed over the money, but the gentleman meant twelve pounds! We were at his mercy and it was no use arguing. He was following the golden Peruvian rule, "Rob the *Gringo*." It was not till later that I heard the black stories of this man's life. It appeared that there were thirteen criminal counts against him, including murder and slave trading, yet, despite this, he was actually standing for deputy. Afterwards, I had a chat with the Commandante of the Guardia Civile in Iquitos and, I think, put a spoke in the blighter's wheel.

We started at ten o'clock in a canoe that was very much smaller and lighter than those in which we had so far been travelling. The two *bogas* did as little paddling as possible, letting the canoe drift down with the stream. Gonzalo had sent a third man with us to ensure that the two Indians did not run away. Without this precaution,

the men would certainly have seized their chance to escape from their task-master. These Indians had a curious circular motion with their paddles which must have been very tiring, for they lifted a quantity of water at the finish of each stroke, and hit the side of the canoe with the handle of the paddle. Neither Machiguenguas nor Piros have the least idea of paddling in unison, and they fail to take full advantage of the force of the current.

We had now left the Rio Urubamba, and embarked on the Rio Ucayali. We caught a fifteen-pound fish and shot some small ones with bow and arrow, then, after dark, made camp below El Pozo, where there is a dangerous whirlpool. We had been warned that mosquitoes were bad, and that we should require our nets, but as there seemed to be none about and it was late, we did not bother to put the nets up. Half an hour later, out came the mosquitoes in mass formation, and there was a frantic rush to cut canes and string up the nets.

We had gone to bed early with the idea of starting about two in the morning, so as to avoid the intense heat of the day. At two-thirty a clap of thunder aroused me, but as the storm seemed to be distant we packed up our beds and went. There was a bright moon, and we glided peacefully down the river until five o'clock when, without the slightest warning, the storm burst on us with tropical fury. We headed the canoe to the bank and luckily found the houses of some Campo Indians. You could hardly call them houses for they were small thatched shelters without any walls, but with the floors raised two or three feet above the ground. In one corner of our refuge there was a big fire blazing and in the centre a mosquito net under which slept the owner, his wife and the family. The storm lasted an hour, and meantime, we fed on *yuca* and bananas, which the Indians kindly gave us, then we set off again, but the rain, coming down in torrents, forced us to shelter once more.

This time we discovered an abandoned house, where we lighted a fire and cooked breakfast. I asked Gonzalo's man why the former occupants of the house had left behind a machete, an axe, bow and arrow and cooking

utensils. He replied that the family had deserted the hut because the owner had died, and I was sitting on his grave! When a man is buried in his hut his personal belongings are always left to help him on his journey. Formerly, the dead used to be thrown into the river, and if the deceased had a small child, they tied his hands and threw him in, too, to accompany his father. This practice has been greatly discouraged by the authorities.

At noon the weather cleared and we went on our way, stopping occasionally to harpoon or shoot fish. That evening we camped at the mouth of the Rio Parocancha, and this time took good care to build a reed shelter and to put up the mosquito net. Here a misfortune befell us, the shutter of the big camera, which was always groggy, refused to work any more, and we found that the remaining films for the small camera were ruined by the rain. Everything had been soaked in the storm for, very foolishly, we had returned the rubber bags to Landa.

On the morning of May 27th, we got away at four o'clock in thick mist. Luckily, the moon gave sufficient light to see one bank. At half-past one we reached Cumaria which stands at a height of one hundred and ninety metres. On one bank of the river were a dozen or so of palm huts, on the other a large bungalow with windows. True, there was no glass in them, but we had not seen a house with windows since leaving Quillabamba. This house belonged to Señor Jose Dolci, who, with his wife, also Italian, made us most welcome.

Our first enquiries were about a launch, and we learned that the *Beatrix* had been expected since the 20th of the month, so it seemed possible that, for once, we had not arrived too late. There is no time schedule for the launches. Their arrival depends on how many calls they have to make to pick up cargo. For the first time for six months we listened to gramophone records that were not Incaic, and realized that there was such a thing as civilisation. Yet only two days before we arrived, an immense boa constrictor had been killed on Dolci's plantation.

Our host grew sugar cane and manufactured sugar from it, six thousand pounds a year, which he sold in Iquitos.

He owned three hundred acres, and had a considerable number of cattle and pigs. Since the ground around the house had been cleared for grazing, there were pleasantly few mosquitoes, and these were not of the malarial type. The weather turned very hot and sunny, and we put everything outside to dry. There was a place to wash and even an outside enclosed bathroom. Dolci told us to put out anything that needed washing, and it was not only washed, but brought back to us mended. For the first time for many days I shaved and felt cleaner.

The weather here is subject to remarkable changes. On May 29th came heavy rain with a bitterly cold wind. I was none too warm in a sweater and thick coat, and at night actually shivered under three blankets. We were warned against bathing in the river. There is a curious worm, which makes its way into the body, necessitating an operation to get rid of it; there are also shoals of the bull-dog fish, *piranha,* which attacks swimmers. Though small, rarely weighing more than two pounds, it has jaws powerful enough to bite off a toe or a finger. It is specially attracted by any trace of blood in the water, and there are cases on record of a wounded animal, such as a bullock, having been eaten alive and every atom of flesh stripped from its bones within a few minutes. There are also electric fish which give a dangerous shock.

The food was excellent and a real treat to Chadwick and myself, who had been living rough for so many weeks. These people had not the fearful habit of making everything into soup. Fowls, ducks, monkey, parrots, pigs, rice, bananas, *yuca,* bread and beans provided plenty of change. There was also fish in every variety.

Two days later there was still no sign of the launch. Felix Jablonski, manager of the Polish Emigration Company, arrived in a canoe from Tambo on his way to Iquitos, and assured us that no launch would arrive for at least a month, but that there was one leaving Massisea on June 9th. This, he said, was a mail carrier which travelled much faster than the ordinary boat. He very kindly offered to take us in his canoe if there was room for us and our baggage. The canoe, truly, was small, yet by lashing a large log of

balsa wood on either side, we made it river-worthy. He had hired the canoe and a Piro and his wife as *bogas* for one *sole*, that is 1s. 8d. per day—slightly cheaper than our twelve pounds! He had got his Piros from the German Adventist Missionary at Tambo. This man, Herr Schafler, was very much trusted and like by the Indians. A little while earlier they had come to him with a story of white men whom they had seen several times at the edge of a big lake deep in the forest. They reported that these white men were not dressed as white men dress, but in Indian fashion, and that they always disappeared into the forest when they saw anyone. The Indians had promised to guide Herr Schafler to this place and give him safe conduct while he investigated the matter. Had I heard of this sooner, I should have been strongly tempted to have had a try to go with the Missionary. It is curious how persistent are these stories of white Indians. It is, of course, well known that the Spaniards, after their first conquest of Peru, reported the existence of white natives, fair as Englishmen, with fair hair and small hands and feet.

It was one o'clock on June 2nd before the canoe was ready. Then we started at once. We were anxious to get away, because Dolci's mother-in-law had died that same morning. The Piro and his wife paddled very well and easily. Piros are in the habit of taking their wives on hunting expeditions, to manage the canoe while they shoot or harpoon fish. During that day many fresh-water dolphins (*bufeos*) played round the canoe. They came up for air with a big snort and dived down again. They have a curious resemblance to great pigs. We stopped at a *hacienda* called Vainilla, and bought two chickens, a dozen eggs and two bottles of *caña* for two *soles*. The owner was reluctant to take our money and insisted on giving us coffee. That night we camped on one of the islands of the Shaguana Archipelago.

The stream had become very sluggish and our progress was proportionately slow. Fortunately, this did not matter, for we had plenty of time before the launch was due to depart. Next day we loafed along, stopping to buy eggs and bananas at a Chama village. I also bought

one of the silver nose-pieces which the Indians wear, necklaces of vegetable beads coloured with native dyes and some bracelets of monkeys' teeth. In this village we were amused by watching an old woman gathering firewood with her toes, which were prehensile as those of a monkey. The *playa* on which we camped that night had pools of stagnant water behind it, so we felt sure that we were in for a bad time with mosquitoes. After nightfall they came upon us in such clouds that they actually extinguished the candle. They bit through our clothes and nearly drove us mad. We made a hasty meal, walking up and down with a plate in one hand and slapping ourselves with the other, then rapidly dived under the protection of our nets.

On June 4th, we saw many alligators lying close to the bank among the fallen trees. Sluggish-looking brutes, but when I shot one, it was surprising to see how quickly the rest made themselves scarce. That night there were fewer mosquitoes, but an immense swarm of flying ants, which covered ourselves, our food and everything else. Dolphins were more numerous than ever and we heard them coughing like old men, all night. There seemed to be many jaguars in these wilds, for I saw the tracks of a large one in the sands and again on the following night. I thought it wise to keep a gun handy, but we were not molested. Every night heavy mists shrouded the river and when these cleared, the dew was so heavy that the moisture dripped through the thick linen top of the mosquito nets, soaking our blankets. The country was now becoming less wild. Houses and plantations were seen fairly frequently.

On June 5th, which was a heavenly day, we called to buy eggs at Iparia, the house of Señor Domingo Lima, a Portuguese planter, who kindly insisted on our staying to lunch. We camped that night at a place called Pumancaya. The river was full of life, dolphins, turtles; while birds of all sizes and colours flew overhead. The mixture of nationalities in this part of Peru is extraordinary. At a *hacienda* where we called on the following morning, the owner was half-Peruvian, half-Chinese. He told us that

all the launches on the river were hung up for lack of petrol, of which the usual supplies had not arrived at Iquitos, and that there were rumours of political troubles in Lima. He also said that, if there was a change of Government, the pound notes, not guaranteed by the Banco Peru y Londres, would only be paid seventy per cent of their face-value. This was not pleasant hearing, for very few of our notes bore those precious words. We slept that night on the verandah of a house belonging to a Brazilian planter and, leaving early on the morning of June 7th, paddled all day under a pleasant sun and reached Massisea at six-thirty.

We gave our Piro paddler and his wife three tins of gunpowder, some fish hooks, needles and a small knife in addition to the agreed money payment. They were very pleased. These Indians resemble the Irish peasant in their tactful methods of avoiding any responsibilities. Ask an Irishman how far to the next town, and his answer is, "A mile and a bit." In similar fashion, if I asked my Piro, "How long will it take to reach Massisea?" he would reply:

"Three *vueltas*, Señor." A *vuelta* is a bend and might imply any distance.

It is no use asking, "How many kilometres?" He always replies:

"Four or five *vueltas*." If you put a direct question, he always agrees. For instance:

"Is this a good *playa* to camp on?"

"*Si*, Señor."

"But I see no firewood."

"No, Señor."

"Would it be better to find another one?"

"*Si*, Señor."

It is the same on a mule journey. Indians always reply in hours and not in distances, and will point vaguely to a spot in the heavens where the sun should be when you reach your destination.

Although Massisea is but a small village, it has a wireless station and a police station. It is the spot where the aeroplane service from Iquitos to Lima changes the hydro-

planes for land planes. As we neared it we saw four planes landing and wondered at this unwonted activity. On arrival we heard that a machine had come down in the river with engine trouble and that an Englishman named Bice, employed in a bank in Iquitos, and a Peruvian pilot, had been drowned. The other passenger, an American named Dillon, from whom I got the whole story later, was the only survivor.

The machine had, it seems, struck the water almost without warning, but the occupants were unhurt and managed to get free of their belts. The Englishman, Bice, and the pilot, Cornejo, jumped into the river, which here is six hundred yards wide, with a very strong current and an ugly undertow. They did not even wait to remove their clothes, but the American, Dillon, had the sense to strip to the skin, even throwing away his money belt. A native canoe passed close to the plane as she came down, but sheered away quickly. Dillon had nearly reached the bank before he was picked up by another canoe, but the other two were drowned and their bodies were not found until some days later. It was a most useless waste of life, for there were actually four kapok life-saving cushions in the plane. Had any of them known or thought of this they would all have been saved.

The hydroplanes come from Iquitos, calling at Contramano for petrol and flying thence to Massisea, from which point the journey is continued by land plane to San Ramon. This is a dangerous stretch as the planes have to fly over thick forest where there is no landing place. I myself saw a plane which had been forced to fly low, with six arrows sticking in the wings. From San Ramon passengers travel in cars to Oroya, a journey of six hours, and thence by train to Lima. The record time for the whole journey is thirty-six hours, but the normal time is forty-eight. The aeroplane fare is fifty-five pounds, and the passenger has also to pay car and train fares, but since the only other routes are by Tambo or Pachitea, by launch, canoe and mule, and take fully a month, there is little difference in the cost between the two, and the saving of time is well worth the extra money. The planes do not go directly into Lima as

they would have to rise to a height of over twenty-one thousand feet in order to clear the Andes.

The hotel at Massisea is small, a shack with one guest-room and no furniture. There is a covered verandah which acts as dining-room, where food is provided at a cost of three and a half *soles*, that is five and tenpence per day.

"Quite enough, too," was Chadwick's comment, and I agreed. There was no beer, nor were cigarettes or matches obtainable.

The launch *Clavero* arrived at nine o'clock on the morning of June 10th. She was a disreputable-looking craft and sadly lacked a coat of paint. She had two covered decks and six small cabins. The captain was most anxious that we should embark at once, but we suspected that this anxiety was promoted by a desire to get our passage money before the mail launch arrived. We decided to wait and take the first one to leave. We preferred the idea of the mail launch since it would not make so many stops for trading.

We sent a cable to the Sacambaya Company asking that news should be sent to us at Iquitos, and another to Massey, the British Consul at Iquitos, to hold our letters for us, for we had decided that, if Sanders had returned to Sacambaya in March or April, we would cut our trip short and fly back to Lima.

We were glad of even the small comforts which Massisea provided, for our bodies were covered with bites from every kind of mosquito, sand fly, ant and other Peruvian pest. In addition we were suffering badly from prickly heat. We took things easily and strolled about viewing the local industries. The principal one is the harpooning and drying of the *paiche* fish. This is a huge creature and makes infinitely better eating than any of the other sorts from the river. We found Jablonski a most interesting companion. He spoke not only Spanish and English, but French, German and Russian, and he had a good supply of books with him. These included histories of Peru, Lord Chesterfield's Letters to his son, in Spanish, and books on psychoanalysis. We certainly never expected to meet anyone with whom we could discuss Coué and Psychology in a canoe on the Ucayali River.

CHAPTER XIX

IQUITOS AT LAST

THE mail launch failed to arrive so we embarked in the *Clavero* at eleven o'clock on the morning of June 11th. Besides ourselves there were only three other passengers, a Guardia Civile and his bride and a Peruvian. There was no bedding in the cabins, just a bunk with a mattress. Other first-class passengers slept in camp beds or hammocks on the deck. There was a shower bath about the size of an upturned coffin, which was usually occupied by women washing their garments, while the lavatory basin was on the main deck next to the dining table.

In spite of loose bearings the *Clavero* thumped along at a fair pace, stopping occasionally to pick up cargo. We had paid three pounds a piece for our fare to Iquitos. This launch burned wood, not petrol. Her fuel was paid for in merchandise at the nominal rate of fifteen *soles* per thousand logs.

It took two days to journey to Contramano which is nothing but a village. We moored to a post in the bank, but the post broke loose and there was great excitement when we drifted engineless for some distance down-stream, the captain being ashore. Cigarettes had run out aboard the launch but we managed to lay in a further stock. Dillon, the American survivor of the aeroplane accident, came on board, together with several other passengers.

Many *balsas* were drifting down the river. These huge rafts were really house-boats. They had hutments with thatched roofs, pens for animals, and a cooking place with an earthen floor. Each towed two or three canoes astern. They drift lazily down stream, carrying products, and are steered by means of two long poles with broad paddle blades fastened to the ends. When it arrives at its destination,

the *balsa* is simply turned adrift, while the Indians return to their homes up-stream in the canoes. Just before dawn on the morning of June 14th, the launch ran slap into a sandbank and all her sleeping passengers jumped up in a hurry to find out what had happened; so did I, forgetting that I was sleeping in a lower bunk, and consequently nearly knocking myself out. It was no use going back to bed so I went on deck and had the luck to see one of the strangest sights that I ever came across in all my wanderings, a desperate fight between an alligator and a jaguar. Possibly the jaguar had been fishing—they are fond of fish—when the alligator had risen to the surface and seized it. The alligator was trying to pull the jaguar into the water, while the jaguar exerted all its splendid strength in striving to get the alligator up the bank. The alligator was not a large one and the contestants seemed so fairly matched that it was difficult to foretell the result of the struggle. Unfortunately, the captain of the launch and another man seized rifles and blazed away. Neither of them succeeded in hitting the animals, but the reports and the thud of the bullets in the sand-bank alarmed them so that they broke apart. The jaguar leaped to the shelter of the forest and the alligator sank out of sight beneath the water.

On the following day we stopped for a couple of hours at a place called Riqueña, where there is an Augustine Mission. We went to visit it and were received by four pleasant Sisters. The Mother Superior, who was a French-Canadian, was quite young. They had an excellent school, said to be better than any in Iquitos; the dormitories and all the rooms were spotlessly clean. The Reverend Father, who is head of the Mission, showed us his up-to-date printing press, boot shops and biological and chemistry departments. He told us that he was installing a cinema and a theatre with all the scenery painted on the premises. He was like a child in his enthusiasm. Here was a Mission doing real good. Teaching trades, cleanliness and a sense of responsibility.

At this spot there had recently been trouble with the Indians who had killed several whites. A girl passenger on the launch told us that she had been with the party who were attacked. She had managed to escape into the forest where

for seven days she existed on wild fruits before she was rescued. The Government sent troops but the forest is so dense that it was impossible for them to discover where the enemy were concealed, and they were in constant danger of ambuscade. It is said that the Indians are cunning enough to cut the vocal chords of their poultry so as to prevent them betraying their whereabouts. The cost of this utterly futile expedition was charged up to the traders of the neighbourhood. Only two days before our arrival there had been further trouble by Indians who had been led by a Peruvian renegade, an ex-rubber trader who had armed them with rifles. On June 16th we arrived at last at Iquitos, having accomplished what we then thought to be the most difficult part of our journey, six hundred miles by canoe and six hundred and fifty by launch. Iquitos, which takes its name from a tribe of Indians, is a clean-looking little town. The buildings are mostly of two stories with corrugated iron roofs. The principal streets are brick paved and a toy-like steam tram runs down to the docks and the football field. There are about forty motor-cars in the place and one can be hired for an hour's run at a cost of one pound. Such a trip is possible only if the weather is fine. If it has been raining the roads are just mud ponds.

The principal hotel, magnificently styled " The Malecon Palace," gives a visitor a room, a bed, a sheet, a pillow but no towel. All meals, including morning tea, have to be taken at a restaurant. The room costs two *soles* a night, and the average meal about two and a half *soles*. The only bath water consists of rain collected from the roof. Fortunately it rains frequently. If there is no rain for six days the streets begin to talk.

The only amusements are the cinema, which functions three times a week, and little hops in private houses among British, American and German colonies. There is a form of dry law in force on Saturdays and Sundays, when no alcohol may be sold. One pleasant feature of the place is that tips are not customary.

I had a long talk with the editor of the local paper *El Echo*, who told me that there was no freedom of the Press in Peru. Two local papers had been closed down by order of

the sub-Prefect, who, incidentally, was owner of an opposition sheet, and the *Echo*'s editor had twice been deported. He was anxious for an article on our experience, which I promised him.

On the way up from the launch Dillon introduced us to Massey, the British Consul, who looked at us rather askance. It is true that Chadwick and I looked tough, and it was easy to see the Consul's fear that we might turn out to be beachcombers and cause him trouble. Sharpe, the bank manager, was more civil when we went into his place to cable for cash, and when this arrived the English and American colonies had glib excuses as to why they had not been able to invite us to tea or dinner earlier! All three of us had our tummies out of order owing to bad and irregular food but a few days' decent feeding and some Epsom Salts put us quite right again.

It was difficult to imagine Iquitos in the boom days when all the *caucheros* were earning big money and spending it as fast as they made it.

Some years ago there was a boom in *balata*, of which thirty per cent can be extracted in gutta percha, for electrical work, and the residue is made into belting and soap and sold to Lever Bros. We were told that one of the favourite tricks of those times was to barter a muzzle-loading gun for a certain quantity of rubber; but these guns were made with wire barrels, so devised that they fell to pieces or burst after about forty rounds had been fired. The Indian, once the possessor of a gun, did not feel inclined to do any more work, so was forced, if still alive after the explosion, to come back to work so as to procure another.

On the morning of the 25th we heard that the launch *Huana Capac* was sailing next day up the Napo. Huana Capac was an Inca Emperor who was torn to pieces by wild horses in Cuzco, by order of the Spaniards. We had not expected her to sail for another week or so, since it was known that she was taking relief troops to the frontier, and that, before these were allowed to depart, confirmatory orders had to come from Lima. In the old days when the sub-Prefect, who was also Commandante of the troops, required a little extra pocket money, he would send in a bill

for the movement of troops that remained stationary. Apparently this game was played once too often, or someone did not get enough out of it, so now all movement orders are confirmed from Lima.

The result was that we had a busy day. We required pyjamas, shirts, trousers, etc., all of which had to be made. We had also to lay in a stock of tinned food for the canoe journey. I was luckily able to buy an electric torch, an article which I had sadly missed on the recent trip, as there was not one to be had in Cuzco. For a hammock, for the launch on which there were no cabins, I paid sixteen *soles*; a pair of khaki trousers cost me fifteen *soles*, and a pair of sun-glasses, four *soles*. Jablonski was very upset to find he could not get away in time to accompany us as he had intended. I, too, was very sorry, for he was a charming companion and we owed him a great debt for rescuing us in his canoe at Cumaría. Had he not done so, we might have been stranded there for weeks.

It was only after making many enquiries that we had decided to continue our journey to Quito by way of the River Napo. Yet, in spite of all our questions, we had obtained little actual information about this river, which is one of the head water tributaries of the Amazon. Some of our informants declared that it was very wild and dangerous country, but we had learned to discount such tales.

Most writers of travel-books on South America seem to have passed through Iquitos, and old-timers there are highly amused at the powers of imagination displayed in the descriptions by these trippers. One, a Frenchman, described Iquitos as the capital of a cannibal country where human flesh was common diet, and declared that the restaurant was infested with alligators. This account was published in a well-known New York newspaper. Another place—a well-known town—San Ramon was placed by a journalist in the heart of an inaccessible jungle, when, in reality, it had a perfectly good motor road and an aeroplane service.

I received a cable from Sanders which considerably relieved my mind. It gave satisfactory news of the meeting of the shareholders of the Sacambaya Company in London,

but said that, owing to the trouble with the Bolivian Government, there would be no more digging this year. This meant that all my time was my own and that I need not trouble to return by any specified date.

Fortunately for us, the launch was not due to sail until six in the evening, which gave us time to collect our purchases, and to lunch with Mr. and Mrs. Pant, Evangelist Missionaries. Mr. Pant was the one man who seemed to know anything about the Napo, and had given us much useful information about our journey to Quito. The *Huana Capac* was a smaller launch than the *Clavero*, and was towing a covered barge larger than the launch itself, which accommodated thirty-five soldiers. When I asked why the soldiers should be sent up with this launch instead of one of the five Government launches, the reply was that it was much cheaper on account of the graft, for if fifty tons of wood were used on the journey, one hundred and fifty would be charged for.

The fare we paid, for our journey to the frontier of Ecuador, was five pounds apiece. Until arriving at Iquitos, all our travelling had been with the stream on a falling river, but now we were going against the stream with the river at its highest, for the rainy seasons north and south of Iquitos come at different periods of the year. At two in the morning we left the River Amazon and entered the mouth of the Napo. The land and most of the houses, which we noticed were raised on poles, were flooded. Taking advantage of the deep water, the pilot made short cuts between the islands so as to avoid the fierce current of the main stream. Navigation is done by men bred and born on the river. It is sheer instinct on their part. They use no charts, which would be useless, since the river-bed is constantly changing. They have an uncanny gift of knowing by sound whether the water is deep enough for the vessel. Nearly up to the frontier the Napo averages about half a mile in width, and is broken by many islands.

Many companies have tried gold washing in the Napo and its tributaries, yet so far none have been able to make it pay. There is gold. The Indians can wash two to five shillings' worth in a day, but it is mixed with quantities

of magnetic iron, from which it is very difficult to separate the dust. It is in this part of the world that the famous *curare* poison is made, which the Indians use for poisoning their arrows and blow-gun darts. It is deadly only when injected ; the antidote is salt, and the natives get monkeys alive by shooting them with poisoned darts, then applying the antidote. They will pay dearly or work hard to get hold of a good supply of the poison, so it is a valuable trade asset. It does not act very quickly and the Indians test its strength on frogs and toads, watching to see how long they take to die. The poison is put up in pieces of hollow cane and resembles nicotine. Years ago, certain enterprising traders filled a number of canes with tobacco juice, and for a time did a roaring trade, but the Indians are now wise to this trick and careful to test each cane before they buy.

The food was much better than that aboard the *Clavero*, but progress was slow, owing to the launch having to tow the heavy barge. We constantly stopped to take wood fuel, and I was able to land and get a little exercise ashore. On one of these occasions I saw an Indian holding a live parrot over a fire. I could not understand this barbarity, but it turned out to be the Indian method of taming parrots. They hold them in the smoke of a fire for two or three minutes until the birds are stupefied, so as to accustom them to being handled, and the process is repeated until the bird is quite tame. All these Indians are abominably, if perhaps thoughtlessly, cruel. They skin and pluck wounded animals and birds without bothering to kill them, and seem to have no idea that animals are capable of feeling pain.

Tagua, that is, vegetable ivory nuts, and rice are the principal crops grown in this region. There was no animal or bird life to be seen on the banks, the reason being that the river was so high they had left for higher ground. We ate a new and strange animal called *anuchi*. It had a hammy flavour and was distinctly good. I was awakened about midnight by a rifle shot, and was needlessly alarmed —it was the customary signal for the launch to heave to, to take passengers or parcels on board.

On June 30th, we dropped fifteen of our soldiers at the mouth of the Curarey River, up which it is possible to enter Peru from Ecuador. There were frequent storms with very heavy rain, but the heat was terrific when the sun came out, and the launch might be described as a small platform built round the funnel of a furnace. At night there was thick fog and we ran into an island and had to wait until the mist cleared away. Then it was found that the river had fallen no less than two feet in the night. Alligators were plentiful, some of them as much as fifteen feet in length and on the islands were kapok-trees, which have large brilliantly red pods.

It was eight on the morning of July 8th that we arrived at Cabo Pantoja, which is, at present, the Peru-Ecuador frontier. This matter of frontier is in constant dispute between all South American Republics, and arbitration or war is always going on. Here the Peruvians keep a garrison of fifty soldiers, but the Ecuadorians have none. The latter called the place Roca Fuerte. The Lieutenant in charge looked at our passports. I do not imagine that he has any other duties. We stayed aboard the launch all day, but early next morning a heavy storm drove us out of our hammocks. Meyer Cohen, who was in charge of the trading department of the launch, and who had gone out of his way to make us comfortable, insisted that we should stay aboard for a special dinner of roast duck, fruit salad and avocada pears, most of which meal he prepared with his own hands.

Among the passengers was a Peruvian Major on a visit of inspection, and a Lieutenant and his wife, both coloured. He was, I think, the fattest man I have ever seen. There was also a German, Hans Heine, who had intended to go to the Putumayo country, but at the last moment the man with whom he had arranged to travel had an attack of fever. Heine, therefore, decided to go to Quito by way of the Napo and, hearing that this was our destination, asked if he could join forces with us. We were glad to have him, since it lessened the expenses and was an additional security in case of trouble.

Cabo Pantoja is merely a post for fifty soldiers under a

Lieutenant who serves there for a year. It consists of three large reed houses for the soldiers' quarters, a house for the Officer in charge, and a wooden watch-tower overlooking the river. This, however, is quite useless, for there is no searchlight, and any canoe could pass unnoticed on dark nights. Under this tower is a punishment cell in which are two coffin-like boxes. Drunks and delinquents had to stand in these for the hours of their punishment. Only the tops are open to the air. Two hundred yards away, one crosses a muddy ditch and enters Roca Fuerte in Ecuador, a village of some twenty-five reed-roofed houses built up on poles. Here are several stores, but at the time of our visit they had hardly anything to sell.

There are no roads, nothing but mud paths, over which, in the worst places, slats of wood have been laid to save the passenger from sinking knee-deep in slime. There was nothing to see, nothing to do except lie in our hammocks. By the way, the secret of comfort in a hammock is to have a very wide one and to lie diagonally across it. We were forced to wait fifteen days in this benighted spot while a man went up-river in search of *bogas* and a canoe. It was a bad time to travel, for the river was in flood and every available man busy getting in the rice crop. With our usual luck we had missed by two days a canoe which had brought down a cargo of rice and returned empty.

The normal rate of exchange is two Ecuadorian *sucres* for one Peruvian *sole*. This seemed nice and simple for reckoning purposes, but alas, one soon discovered that no one possessed ready cash of either country. The launches trade merchandise in exchange for rice and other products, and refuse to pay cash. The natives are absolutely at the mercy of the launch owners, and are forced to take such merchandise as they offer, or go without.

The man with whom we had made arrangements for a canoe was Don Jorge Rodriguez, and he promised to have a canoe and *bogas* ready within a few days. During this weary time of waiting I sorted out and mended my kit, wrote up my diary, dried skins and had my teeth scraped by a travelling dentist. One day I called on the fat

Lieutenant who had come up in the launch with us. He regaled us with sweet port, tea and bread and cheese.

On another day I struggled down a miry track to a village of Secoya Indians. In dry weather it should have taken two hours to reach, but it took nearly five hours, as there was mud to one's knees and much cutting with the machete. The men wear the *cushma* or sleeveless tunic, like the Machiguenguas. They paint their faces and smear their arms and legs with *achiote*. But, unlike the Machiguenguas, they keep their hair short. Rows and rows of white beads are coiled tightly round their necks, looking at a distance like high collars, while they also wear coloured beads around their wrists and ankles. The only garment of the women is a short skirt of coloured calico, but they also indulge in a superabundance of beads, and it is extraordinary the time that these dirty, dusky ladies spend on the elaborate make-up of their faces and bodies. "Secoya's lady and Judy O'Grady are sisters under their skins."

The principal part of the toilet is the use of herbs that will attract men. A newly born child is washed with *achiote* and an oil bean (*habilla*) together, and the mother is bathed in the water from certain herbs, and, usually, the next day she is up and about as though nothing had happened. If the child is a girl she is circumcised—the clitoris is cut with a sharp wooden knife, and the wound dressed with the *achiote* and *habilla* mixture—down extracted from a palm shoot and soaked with *achiote* is used as a dressing.

The reason given for the operation is that the clitoris is ugly when it grows and promotes a bad disposition.

Marriage is with the chief's sanction. The hand of the bride is often asked at birth. At the age of seven she is taken to his house to learn his ways and tastes in the way of food. When she arrives at the age of puberty she is segregated with the women until after the first menstruation. Some of them had their lips painted dark blue, a fashion I had not previously seen.

Their only industry is the weaving of *cushmas*, the making of hammocks and of the bead bracelets of which they are so fond. Colds and rheumatism are common among them, and for these ailments they use a remedy which they call

sanango, made by scraping and washing the peel of a certain plant, which is then wrapped with a little tobacco in banana leaves and toasted before it is swallowed. To keep off the pangs of hunger on a long journey they make a drink from the scrapings of a reed mixed with water. This they call *yoco*. The tribe has been decimated by dysentery, catarrh and measles, and there are now only about three hundred left.

Most of the Indians seem to enjoy being baptised, which they regard as an interesting and harmless ceremony. An Augustine priest told me that he had often preached to the newly baptised, speaking of Hell and the destiny of the human soul, and they had answered that they knew nothing of God because they had never seen Him, that Heaven and Hell were places of which they did not know the whereabouts, because none had come back after death to tell them. " When one of our tribe dies we wrap him in his hammock, and keep him for four days, after which we bury him in the house where he died, and there we leave him and do not come back any more to see him."

Missionary work must be a heart-breaking job !

This old priest, a Frenchman, had spent forty years with a tribe of Indians, and was very anxious that we should go back and stay with him. He promised us wonderful cinema and camera pictures and an insight into many curious customs. Alas, we could not spare the time.

The Indians who live on the Amazon tributaries are, in most cases, the unfortunates who have been caught by the white men and, primarily, by the old rubber traders. Each tribe has a white " patron " who lets them have the cheap goods their souls covet, but takes care to make them work hard and to keep them always in his debt. In one place I saw rubber being brought in by the Indians and weighed by the patron, who had an arrangement to pay them a fixed price in trade goods per *arroba*, that is twenty-five pounds. If the scales registered fifty pounds he told them there were only thirty pounds, and the poor devils had to take his word. Under these circumstances it is not wonderful that any free Indians we saw on our journey fled at our approach. The wise ones had betaken themselves to the

deepest fastnesses of the forest and immediately killed any trespassers on their domain. Should they happen to have fallen under the sway of a good patron, like Señor Pereyra, they are well off, if not, they are simply slaves. Unfortunately there are very few good patrons.

I was given a list of useful trade goods to take into the Putomayo district, by a man who knew the country well: machetes, dynamite, white Menthalatum (for mosquito bites), sun glasses, commercial arsenic (for curing skins), muzzle-loading guns (small bore), powder, shot, caps, rolls of cheap cloth, curarina for snake bites and fever, hypodermic syringes, red, white and blue glass beads, Tagua beads, cottons, cheap jewellery, morphine pills.

CHAPTER XX

FIGHTING THE FLOOD

THE canoe arrived with six *bogas* on July 19th but there was no sign of Don Jorge and he had told the men that they were not to start until he arrived. We waited all that day and most of the next. Still no sign of Don Jorge, but a report that he was lying drunk at some place up the river. I lost my temper and began to see red. I called the *bogas* together and, with the help of an interpreter, made them understand that they be very well treated and given lots of *caña* if they would start in the morning. After a deal of persuasion they agreed.

By morning the effects of the *caña* had rather worn off and the men were very reluctant to leave, but by dint of a mixture of threats and more drink we got started at nine o'clock. The canoe was about fifty feet long. A third of it was roofed over with reeds which gave space to shelter the luggage and ourselves from the sun and rain. Five men paddled in the bow, while the head man sat steering in the stern. Two hours later we met the belated Don Jorge. By the look of him he certainly had been celebrating. He was very taken aback to find us on our way, especially as he had planned to send a lot of cargo with us in the canoe. He could not understand our hurry. What, after all, was a day more or less! However, we paid him six *soles* for twelve days' hire of the canoe to a place called Armenia, and he gave his *bogas* strict instructions that they were not to go further, assuring us that we should find plenty of men to take us up from that point. But we hoped to be able to induce these same *bogas* to go right on with us. These *bogas* were of no particular tribe. Nearly all the river tribes have been decimated by epidemics and warfare, and the remnants are classified under the name of Yumbos.

We called at the *hacienda* of San Miguel to buy *yuca* and bananas, but the recent floods, the worst known for years, had destroyed nearly all the plantations. Here we found a Scotch naturalist, Clarke-MacIntyre, who was collecting for the British Museum, and who gave me a useful tip for the preservation of skins—alum and commercial arsenic mixed one in three with yellow soap and a small quantity of resin added to re-harden the soap. Alum tightens the skin and prevents the hair falling out. In this damp atmosphere everything goes mouldy, so plenty of airing in the sun is essential. That night we stayed at a *chacra* belonging to San Miguel called "San Antonio." Mosquitoes were plentiful again and we had to use our nets.

We got away early on the following morning and travelled up a broad stretch. Late in the afternoon we arrived at a *chacra* known as "Vittoria," a dirty, poverty-stricken place. There were only two inhabitants, an old woman and a younger one, the latter covered with ghastly sores. I knew of nothing to help her so we made an excuse and pushed on a little further until we found an empty house where we slept. We were still unable to obtain *yuca*, so the men were on short rations and we ourselves had to eat tinned food and biscuits. There was absolutely no fruit except unripe bananas.

Although there are *chacras* every few miles along the river, there are certain *playas* on which it is dangerous for small parties to camp, for the forest Indians come down to rob and kill. In some places the Indians have the pretty habit of poisoning the drinking water when they know white men are in the neighbourhood. Very few birds or animals were visible, although there were plenty of alligators and iguanas a short distance up the tributary streams. On the next afternoon we were lucky enough to get *yuca*, *chícha*, bananas and eggs, and late that evening reached a house where some of the *bogas* lived. The men had put in thirteen hours of heavy poling and paddling, yet did not seem at all tired. The patron of the place was away, so we dossed on the verandah. Here the Indians had blow-guns (known as *pucunas* or *cerbatanas*). These were about ten feet long and from them

were shot darts thin as matches about twelve inches in length, poisoned with *curare*. With this weapon they made fairly accurate shooting up to thirty yards.

Next day we started in a drizzle which turned to heavy rain lasting till midday. In spite of the rain the river was falling, leaving great stretches of sand above the surface of the water. Our old friends the dolphins amused themselves and us by playing round the canoe. They would come to the surface quite near, give a huge snort, then lazily disappear again. At lunchtime our Indians showed us a new way of catching small fish. A man would run along the edge of the bank and when he saw fish in shallow water, would bring down his fifteen-foot punt-pole with a smack on the surface. This usually resulted in stunning three or four. At half-past four heavy clouds showed that another storm was threatening, so we camped on a sand-bank and rapidly built reed shelters. We had just finished our frugal meal of eggs, *yuca* and tea when down came the rain. The huts leaked badly. Those built by the *bogas* of the Napo were not nearly so good as the ones our Machiguenguas had constructed for us.

It rained on and off most of the night, and in the morning was so wet that we had difficulty in getting a fire going, so were late in starting. It was a dark and threatening day, but this we did not mind, as rain in moderation is not so trying as the glaring heat of the sun. At ten we sighted the house of Don Jorge, about two miles distant, and at that very moment the rain came down in torrents. The river was narrow here and very swift, while the water was so deep that the punt-poles could not find bottom. Paddles alone were not sufficient to fight the stream, so we were swept backwards, and in the end had to work our way up close under the bank, hacking away projecting branches and using the tree-stumps sticking out of the water to help us on. It took two and a half hours' very hard work to cover the two miles which separated us from our destination.

At "Eden," as Don Jorge named his home, we were received by a Dr. Roy Torres, tutor to Don Jorge's two small boys. He was the most loquacious man I have ever

met, and my head ached with his ceaseless chatter. Here we slept, and it rained, rained, rained!

Dawn showed that the river had risen again fully four feet. Small wonder after this terrific downpour. The current was stronger than ever, so we thought it advisable to wait a day, though we were bored stiff. What improvident people they are! That day they had killed a cow and then discovered they had no salt with which to preserve the meat. We gave them what we could spare, which was only about eight pounds. It had been arranged that we should be taken to see the rice plantations on the other side of the river, and Dr. Torres said that we would start after lunch, but the lunch did not materialize until half-past four, after which this idiot suggested a start. I protested that it would take at least an hour and a half to cross, with the current so strong, and that by that time it would be dark, so reluctantly he abandoned the idea. Lunch, I may mention, was the last meal of the day.

On July 27th we got away at eight, and I have seldom left any place with fewer regrets. The strong current made progress very slow. During the morning I shot a small boa constrictor on the bank, but it fell into the water and was carried away by the stream. We saw masses of magnificent bamboos, while along the edge of the river grew enormous elephants' ears—caladiums. It was dark before we arrived at Terere, the house of Señor Victor Don. He was away from home, and the employé who received us did not offer us anything, not even a cup of coffee. Luckily we had taken the precaution, as we were arriving late, to have some food in the canoe. This was only the second house in the many in which I have stayed in South America, where no food was offered. We were able, however, to purchase a small amount of *yuca*, bananas and eggs before we left on the following morning.

That evening we reached a tiny hut, where we found a certain Señor Delphin Rivadencia. He apologized profusely, but told us frankly that he had no food to spare. This hut, he said, was used only during the rice season. This left us free to cook our own supper. Don Delphin wanted to know if we knew any cure for tuberculosis and said, in all good

faith, that the latest thing he had heard was that nine raw cockroaches eaten for nine consecutive days was an infallible remedy! All these river people here and in Peru, who live far from medical aid, are great believers in patent medicines, and, although they are costly, keep large stocks of them. There is a certain brand of aspirin, enormously advertised, which they take for any ailment, and even give to infants a few months old. They are also great on injections, and most possess hypodermic syringes with terribly dirty and rusty needles. I remember Pereyra telling me that, in his palmier days, he used to give his Indians Wincarnis wine as a remedy for malaria. It must have cost him a fortune.

The river had fallen next morning and the current was, happily, much less strong. We stopped at La Providencia, the ranch of Señor Abraham Don, where we bought food, including oranges. Abraham was a Jew and we paid accordingly. During the afternoon I shot another boa on the bank, much larger than the one we had lost some days earlier. This was the first day without rain since we left Roca Fuerte. Abraham Don had told us it would be impossible, owing to the rice harvest, to get men at Armenia, but he talked to our *bogas* and they agreed to take us to Serrano, two days beyond Armenia, where we might hope to get others. Secretly, we hoped to induce our present men to take us the whole way.

We camped on a *playa* just below a place called Taracoa. Next morning, while taking a short cut through a backwater, we ran upon a sandbank and for two hours were all in the water, tugging at the canoe and digging away the sand from beneath her keel with paddles. To make matters even more damp the daily storm chose this particular time to pay its visit. Later, some large trees that had fallen right across the stream had to be chopped away; this caused further delay, so progress was slow. After a time the rain stopped, the sun shone again and I had the luck to shoot a couple of turkeys. Again that night we camped on a sandbank. In the morning the bank was reduced to a small island. The river had risen greatly again during the night and was within a few inches of the hut.

Our *bogas* found dozens of turtle eggs in the sands of the *playas*. These were a different variety from those we used to get on the Urubamba, for they were oval in shape. During the morning of the following day we saw tracks of a herd of pigs on a *playa*, and went after them. We were lucky enough to get five with three shots, the Indians polishing off the wounded with their machetes. Later I saw some small green snakes swimming in the river. At half-past four in the afternoon we were fortunate to find an abandoned hut, where we camped so as to give the men a chance to smoke the pigs. Soon enormous fires were going, over which the pig flesh was smoked on green wooden grids. We had fried liver and chops for dinner, a smoky business for the frier—which was my job—but the result justified the trouble.

August 1st dawned with a heavy mist lying like a great pall over the broad river, but it cleared quickly and the Cordilleras came into view above the forests on the western horizon. As we started dolphins played all around us. At ten we reached the point where the Rio Coca joins the Napo. Above this point the Napo is narrower, while the banks are higher and not quickly flooded, but the floods of the previous month were said to be the worst known for at least fifteen years. At Armenia, which we reached at four in the afternoon, an entire island with four houses occupied by Indian families, had been swept away, and we were told that many herds of cattle further up stream had been drowned.

Armenia consists of three houses and an alcohol factory where we replenished our stock of drink. Then came a shock. Our *bogas* refused to go on! They were tired, they said, of paddling against the strong stream, and they confessed that they were frightened of the Jivaro Indians, the head-hunters. Contrary to the usual custom, but fortunately, as it turned out, we had not paid them in advance, which gave us a hold over them. In Armenia there was literally not a single man to be had for love or money. Even the Jefe-Politico, the local magistrate, had been unable to get men to take him to Quito where his father was dying. On the evening we arrived he returned from a

fruitless two days' hunt in the mountains for bearers to carry his equipment. His young and pretty wife had been with him on this search and she must have been made of stern stuff, for she and her husband came back white and drawn, their clothes torn to ribbons, and their legs and arms a mass of scratches and bites.

After extra tots of drink, backed by the authority of the Jefe-Politico, the *bogas* reluctantly agreed to take us on to Serrano. There were no mosquitoes here, but we were advised to put up our nets to protect us against the vampire bats. Two were killed that night in the room next to us, and I heard them fluttering round in ours. The river-bed became stony, and there were constant stops to cut new canes for punt-poles, which soon split. Presently we met Señor Cornejo, the Government Inspector of alcohol, coming down river in his canoe. We had letters of introduction to him and had brought him a sack of salt ; in return he asked us to stay the night at his house further up-stream.

It was hard going that day ; for six hours we forced our way against a strong current and up many small rapids. At four we arrived at Cornejo's home and were received by his mother-in-law, a charming old lady who was very anxious to leave as she was afraid of raids by the Jivaro Indians. These savages come down from the mountains when the dry season sets in, and only a few years previously had attacked a house on the opposite side of the river and killed all the inhabitants. We saw the ruins still standing. Very few white men have been into the Jivaro country, though I heard a story of an American who had killed his friend in a quarrel and who went native and now lives as one of them.

Early next afternoon, after finding our way up more rapids, we reached Serrano, where we found the hut of an Indian woman whose husband was away. At first she said she had no people to give us, for all hers were busy at a distance making two new canoes ; however after some conversation with our men, no doubt to find whether we were trustworthy, and after it had been pointed out to her that we should have to stay until men were found, she began to think better of it. She told us she could find

paddlers for the next morning and was as good as her word. So we paid off our six men, and paid the five new ones in advance six *sucres* each and twenty *sucres* for the hire of the canoe.

Here, as well as further up the river, the Indians wash the banks for gold and get from five to ten grammes each daily. For this amount the Indian receives eight to ten *sucres* and it can be sold in Quito for twelve or thirteen *sucres*. The gold is stored in quills. That evening as we sat in the shack we found a pile of peanuts which we started to eat. There was a cat which ate as many as I would crack for her, but she did not tumble to the trick of cracking them for herself.

While our new men were fitting a reed canopy over the canoe and packing the luggage, our friend the Politico, and his wife, arrived in two small, overladen canoes, for they had been unable to get hold of a big one. We offered to take the cargo of one of the canoes and let our *bogas* help their men. The Politico and his wife were pleased, but their men, or our men, did not seem to relish the idea, so it was decided to go on as we were, but for all the canoes to keep together. The Politico's wife was most anxious for this as she was terrified of night attack by Jivaros. We got away in fairly good time and at half-past four in the afternoon reached the house of an Indian. It was nothing but a large, thatched, wall-less shelter where he lived with his family. Under this we all slept, the Politico, his wife, their servant, our three selves and our *bogas*. I lay awake for some time, watching the largest fire-flies I had ever seen. They were actually flying beetles. One got under the mosquito net, and resembled a miniature motor-car with glaring headlights. As I lay awake I did not hear one of the sleeping people breathe or move. I could have sworn I was alone.

For breakfast next morning the Politico gave us a kind of herb tea called *guayusa*, which is something like the *mate* of the Argentine, and is said to have medicinal properties. We got away early and voyaged all day under a blazing sun. Rapids were plentiful. The *bogas* went overboard and hauled the canoes through the swift water. We stopped at an Indian's house where we bought bananas,

but could get no eggs or *yuca*. Heine, however, got a quill of gold in exchange for four yards of cloth which had cost him about six *sucres*. That night we camped once more on a *playa*.

August 6th dawned with heavy rain and again the river was rising fast. We struck an ugly place in a narrow between an island and the shore, and it took us two hours to force our way a distance of only a quarter of a mile. Then we had to cross the river, and in doing so were swept down again below our original starting point. Heavy logs and driftwood were swirling down the swollen stream, and things became impossible, so on reaching a ruined hut a little before midday we decided to wait there. The men caught some fish with the net and I shot some birds.

These rivers are extraordinary in their sudden rises and falls. That night the Napo dropped no less than six feet. We pushed off at a quarter past seven and made good progress until five in the evening, when we came to the foot of heavy rapids. A few Indians were washing for gold on the *playas* but, as usual, they disappeared into the forest at sight of us. We camped on one of these *playas* and had a meagre meal of lentils with a tin of pork and beans. The last of our biscuits had been finished at lunch. The river continued to fall, which was well for us, for on the next day we met several swift rapids. On the following day, August 9th, we came to a very bad rapid where the *bogas* asked us to get out to lighten the canoe. They then worked it up slowly until they were halfway to the top, when suddenly they got into deep water and the canoe was swept away with the men clinging like monkeys to its sides. It travelled five hundred yards before they could get it under control again. For the second attempt we stayed on board to help with the punt-poles while the men waded, but once more the river took charge. We were swept back and were very lucky not to capsize. The God of the River brought a canoe with five Indians just as we were about to make a third and probably useless attempt. With their help we managed to get up. Shortly after this we came upon another rapid at the top of which we were caught in a furious stream which carried us willy-nilly down another

arm of the river. We cut a liana rope and put three men on the bank with it. Two waded in the water, keeping the bows straight, and we three men remained in the canoe with punt-poles. Just as we neared the top the liana broke. The heavy canoe was tossed and twisted like a cork, and was absolutely unmanageable until the waters threw it disdainfully into a quiet stretch. It was not until a fourth attempt that we were successful.

One o'clock brought us to the house of Señor Lata, the most civilized and best kept looking place I had seen on the journey. Here the river took a hairpin bend with a most dangerous whirlpool at the bend, but with an Indian from the house to pilot us, we safely crossed this bad spot and four hours later arrived at Napo, the end of our river journey. We had had quite enough of river for a spell, having lived on or near it continuously for eight months and travelled eight hundred miles in canoes and more than a thousand in launches.

CHAPTER XXI

HEAD-HUNTERS OF THE AMAZON

PERHAPS no savage tribe ever produced any stranger trophy than those tiny, yet perfect mummified human heads, specimens of which may be seen in many museums. They are the work of the Jivaro Indians who inhabit the Eastern frontiers of Ecuador and the Northern edges of Peru, and whose villages lie along the rivers Napo, Pastaso, Santiago and Morona, all tributaries of the Upper Amazon.

The story of these strange and warlike tribes has been gained from accounts brought in by the few explorers and rubber hunters who have visited the region and who have managed to escape with their lives.

The Jivaros, who inhabit these remote forest fastnesses are by far the most warlike and bloodthirsty of all the South American Indian tribes, and the explorer in search of scientific facts or commercial gain takes his life in his hand when he adventures among them. The blood feuds within the tribes, and the wars of extermination between the different tribes are continuous and unceasing, being nourished by their superstitious belief in witchcraft. These wars are the greatest curse of the Jivaros, and are felt to be so even by the Jivaros themselves, at least so far as the feuds within their own related tribes are concerned.

The education of the boys among the Jivaros first of all aims at making them brave and skilful warriors. When a Jivaro has enemies on whom he wants to take revenge for offences and outrages, perhaps committed long ago, but despairs of being able to do it himself, he systematically does his utmost to awaken and maintain hatred against them in his sons, by discourses and harangues directed against them every day.

When a Jivaro chief goes on a war expedition he often

takes his young sons with him in order that they may early learn the art of war, and get accustomed to the bloody scenes that take place. When a boy reaches the age of puberty, and is to be received among the full-grown men, a feast, which is called *kusupant*, is made in his honour. After the feast, which lasts three or four days, the youth is obliged to take a narcotic drink, called *maikoa*, made from the rind of the bush known as Datura Arborea. This bush seems to have much the same poisonous properties as belladonna or opium, and the drink prepared from its rind or bark has the effect of completely narcotizing the Indian as well as awakening within him peculiar visions and hallucinations which are ascribed to certain spirits. The most important of these spirits are the *arutama* (the old ones); which they believe to be the souls of their ancestors. These spirits appear in all sorts of terrible shapes, as jaguars, eagles, giant snakes, and other wild animals, or reveal their presence in such stupendous phenomena of Nature as lightning, the rainbow, meteors, etc.

Only the Jivaro youth who has seen the *arutama* in the dream, and has been spoken to by them, can expect to become a valiant and successful warrior, and capacitated to kill many enemies, and so secure for himself a long life. The *arutama* speak to the young Jivaro in his dreams and advise and teach him in all kinds of manly businesses, but first of all in warlike deeds. When afterwards in real life he meets a jaguar, an eagle, a boa-constrictor or some other animal, he shows no fright and does not flee, but bravely challenges it with his lance made of the inspired *chonta* palm; similarly, in battle, he meets without fear his human enemy.

A special power is ascribed to the *chonta* palm (a very hard black wood used for bows and harpoons by the Machiguenguas and other tribes), owing to the belief that the *chonta* palm itself is a demoniac tree, the seat of a spirit, which the Jivaros call *wakani* or *iguanchi*; hence the *chonta* lance inspires not only men, but evil spirits with fear.

After drinking *maikoa*, the Jivaro warrior generally receives the revelations of the spirits while sleeping alone in the virgin forests in a small hut made of palm leaves,

usually situated many miles from the habitations of the Indians. The Jivaro warrior not only expects fame and honour from the killing of his enemies, but also material benefits.

The head trophy, called by them *tsantsa*, which he takes from his slain enemy, is not merely a token of victory, but becomes a fetish charged with supernatural power, and the great victory feast, which is called *suamartinyu* and which is celebrated several months after the battle, accompanied by many mysterious ceremonies, is part of the practical religion or cult of the Jivaros. Before the attack on their enemy is made, the Jivaro warriors perform a war dance or exercise with the lance, called *anekma*, which takes place during the last week before the attack is going to be made. The warriors drink much manioc beer to get strength and resistance, and smoke much tobacco in order to ward off evil, supernatural influences. On the eve of the fight they paint their face, breast, arms and legs black with *genipa*. They take tobacco in the form of tobacco-water, which they draw in through the nose, and partly in the form of cigars which they smoke. The women, also, on the eve of a battle, perform a woman's war dance which is called *ihiambrama*, and is supposed to have the effect of protecting their fathers, husbands and sons against the lances and bullets of their enemies.

The Jivaros number some fifteen to twenty thousand individuals and are divided up into many small tribes, each under a chief, who develops the plan of attack, gives his men the necessary instructions, exhorts them to have courage, not to fear the enemy, not to abandon their comrades, etc. These tribes are always warring among themselves, but they invariably unite to repel any attempt of the white men to invade or settle in their country. Their intense hatred and distrust of the white man dates from the time of the oppression that they underwent at the hands of the ancient Spanish and Portuguese *conquistadores*, whom they eventually massacred and drove out of their domain.

After a victory over their foes and a successful head-capturing expedition the Jivaro warriors have to observe certain precautionary customs, one being to slightly prick

themselves with a pointed arrow of the kind that they use for their blowpipes; over the whole body, the arms, legs, shoulders, breast and stomach. This, they believe, will protect them against the spirit of the slain enemy. If they do not take this precaution on the same evening that they have killed their enemy, it is their belief that they will die soon.

The idea is that the spirit of their fallen foe will appear to them in a dream and invite them to dance, to which the warrior's soul must be able to answer "No! I cannot dance as my body is covered with sores!"; otherwise he would have to accept the invitation and dance with the fallen enemy's spirit, with the inevitable result of an early death!

After a battle, the Jivaro warrior who has been fortunate enough to kill a member of the opposing tribe immediately proceeds to cut off his slain enemy's head as close to the trunk as possible, always provided that he is not prevented from doing so by the comrades of his fallen foe. Thus it often happens that the victor, with his gory trophy, is forced to retreat rapidly from the scene of his triumph for several days before he has an opportunity of preparing or treating the captured head in the prescribed manner.

Now for the method of preparing the head or *tsantsa*. The head is first placed on a large leaf spread on the ground, while another leaf from the forest, called *pingi nuka*, to which is attributed magical properties, is placed over the head as a covering. The warrior who has taken the head then seats himself upon his trophy and receives from his chief's mouth a mixture of tobacco juice and saliva, which the latter blows up his nose. This is to protect the slayer from the vengeful spirit of the dead man.

The *tsantsa* or trophy is prepared in the following manner: a long cut is made with a sharp knife, beginning at the apex at the back of the head and finishing down the back of the neck, after which the scalp is carefully drawn away from the skull until the face is reached, where the flesh, which adheres more closely to the skull, is pared away carefully or eased with the knife. The naked skull with all the flesh adhering to it is thrown away, and the scalp is then attached to a vine and plunged into boiling water, where it is

left for a time in order to prevent putrefaction, also for the purpose of assisting the contraction and adding to its consistency. The scalp is then taken from the pot and placed on a stick fixed in the ground in order to allow it to cool off. A ring of vine is fixed in the neck opening at the base of the head, which is then sewn up at the back by means of a needle and thread made out of *chambiri* fibre.

The trophy is now ready for the reduction process, which is accomplished in the following manner : Three small round stones are heated in a fire, then introduced into the head through the neck opening by means of a cleft stick. The head is kept constantly revolving so as to allow the stones to burn off any flesh and blood that may still be adhering to the inside of the scalp. The stones are constantly re-heated in the fire until the process has been completed.

Then comes the real reduction of the head by means of hot sand which is taken from a nearby river-bed, and heated in a broken clay pot called *hakachi*, which is always carried by the warriors on a head-hunting expedition. The clay pot must always be half-broken or the ceremony of curing the head would not be properly performed, and might have evil consequences for the warrior performing it. The head is then half-filled with the heated sand, which is allowed to remain inside for some time, when the sand is emptied out and re-heated in the clay pot, while the dry flesh is scraped away from the inside of the scalp, after which the head is again filled with hot sand.

This operation is continued for several days and even weeks, until the head has been gradually shrunk to one-fourth its original size, although the hair retains its original length. The hair receives particular attention, for it is considered the most essential part of the trophy, the hair, according to Jivaro belief, being the seat of the soul or vital power. The hair of a male Jivaro is longer than that of the female, and a *tsantsa* has hair that often exceeds three to four feet in length.

When the head is shrunken to its proper dimensions, the shrunken lips are pierced with splinters of the mysterious *chonta* palm, to which the Jivaros ascribe magical qualities. The lips are then sewn up with red cotton string, which is

done with the idea of silencing the maledictions and curses likely to issue from the murdered man's spirit against his slayer. The final operation is to paint the head with charcoal.

The warrior who has cut off the head is called " Lord of the Head " (*muka helndlnyu*), and is entitled to celebrate a feast over it, which is held some months later, and to which all his friends are invited. Then large quantities of manioc beer and tobacco are consumed. This feast is called *suamartinyu* and usually lasts three days, and during the celebration the head is stuck on a *chonta* lance which is planted in the ground.

As soon as a Jivaro warrior has killed an enemy he must begin to fast, and during the return home from the fight must only eat a dish called *nauma*, made of boiled and mashed manioc. This food has to be cooked by the slayers themselves, and must not be touched by a woman's hand. The slayer must not touch the food with his own hand, as is his usual custom, but uses wooden pins to eat with, otherwise the food would become polluted with the blood of his fallen enemy on his fingers, and he would expose himself to death. Furthermore, the warriors are not allowed to bathe or wash themselves in any way until after they reach home. They must arrive dirty and soiled with blood just as they left the battle. Then they have a general ceremonial purification after they reach home, for their bodies, their lances with which their enemies were killed, the knife with which his head was cut off, their loin-cloths, etc. From the moment that his enemy was killed the warrior must abstain from certain foods, from drinking manioc beer and from sleeping in the same room as a woman, until after the head has been cured, and the ceremonial feast celebrated.

Another superstition of the Jivaros is that, in primitive times, all animals, quadrupeds, birds, fishes, reptiles, etc. etc., were men—that is to say Jivaros. They believe that the animals had human language, shape, habits and even thoughts and passions. They believe that the animals waged war on each other, and made trophies of the heads of their enemies, just as Jivaros do. And the Jivaros still have a very lively consciousness of their supposed relation-

ship with the animal world, a feature which especially appears in their religious beliefs and poetry.

They especially claim to trace the ancient human qualities in the sloth (called *uyushi*), which helpless animal they consider a direct survival from the remote period mentioned. The sloth they consider a Jivaro in the shape of an animal, but belonging to an enemy tribe, and consequently entitled to be hunted and killed. The sloth is a very old man in their estimation, judging from his slow movements and grey hair, and to kill an old man, is considered, in Jivaro circles, as an exceptionally meritorious feat and a great triumph. Consequently they hunt the sloth with *chonta* lances, and when killed, treat the animal's head in the same way as they do human heads killed in battle, and they hold feasts over them as if they belonged to a human enemy. The stronger the man from whom the head as been taken, the more valiantly he fought before being killed, or the more difficult he was to deprive of his life, the greater the honours accruing to the victor, and the greater the subsequent powers supposed to belong to the head, and the benefits bestowed on its captor.

When the Jivaro warrior has succeeded in killing a enemy who was an old man, and whom it was very difficult to deprive of life, he regards the victory as a special triumph.

CHAPTER XXII

SINGLE FILE THROUGH THE FORESTS

"The way also here was very wearisome through dirt and slabbiness; nor was there on all this ground so much as one wine or victualling house wherein to refresh the feebler sort."

Pilgrim's Progress.

ALTHOUGH the town of Napo bulks largely on the map, it contains but six houses, all built of bamboo and raised on piles so as to escape the floods. One belongs to the District Politico, the second to the local padre, while the third and fourth are occupied by an Australian named Brown and his Irish partner, Littlewood. Brown, who was fifty-four and had knocked about all over the world, was quite content to live in this remote spot. He told me he had reached the age to settle down and that, although he had very little money, he was able to live here for less than a pound a month. He declared the climate was quite good, and that by trading with the Indians in gold and merchandise, he made enough for a yearly visit to Quito where, it appears, he spent the proceeds of a year's trading and monotony in a single week.

On August 10th our friend, the Politico from Armenia, went off to a place called Tena to get Indian carriers, and took a note from us to the authorities to send us ten men as soon as possible. On Brown's advice we decided to go by the slightly more expensive, but, as we thought then, the easier route by Baños, instead of by Archidona. He told us that there were *tambos* (rest houses) on the Baños route, while the hills were not so high. Travelling by way of Archidona, there was always the risk of being snowed-up.

While we waited we spent our time drying the skins we had collected and arranging our luggage so as to distribute the weight into bundles for each Indian. These men are supposed to carry a weight of seventy-five pounds. The Indians, ten of them, arrived on August 15th. They were

young, slightly built, wore nothing but white loin-cloths and did not look capable of carrying the baggage. We settled up with Brown for keeping us, paying him the price of a pig, that is twenty *sucres*, nearly half of which animal we carried with us in the form of sausages, together with cooked bananas, which turned out to be most useful. We also bought *cachasa* (the Ecuadorian name for *caña*) for the men at the rate of one-and-fourpence a bottle. It was pure alcohol, which we broke down by adding half water. The usual allowance is two tots a day, together with a present of a bottle at the end of the journey if all has gone well.

Early on August 16th we crossed the Napo in relays in a very small canoe. We had with us a young Ecuadorian named Bolivar who had been educated in America and Europe, and spoke English. He was to come one day with us on the journey. The Indians each carried seventy-five to eighty pounds of our gear, besides twenty to thirty pounds of *chicha* and food for themselves. Several of them had, in addition, muzzle-loading guns. Also there were two boys of about sixteen and a small girl of ten who carried some *chicha* which, with bananas and *yuca*, forms the Indians' food. The rate of pay was tenpence a day, and the Indians had to provide food and bearers for this at their own cost.

For the first four hours the track was not bad. Then we came to the River Ansu, which we had to cross. By good luck a canoe came along and ferried us over, so saving us from stripping, as the river was very swollen with rain. The track was narrow. We walked single file. At about four in the afternoon we had to cross the Rio Ansu a second time, and then reached a *hacienda* called "Carolina." Bolivar seemed a great favourite with the determined-looking old woman who owned the place, and with her two daughters; but they were not at all cordial to Chadwick or myself. I wished to push on for another hour to the *hacienda* of "San Salvador," but the Indians were most unwilling and it had started to rain again.

I begged Bolivar to assure the old woman that we were not bandits and that we would be no trouble to them, and presently they grew a little more friendly. I had thought

out a subtle speech with a sarcastic sting at the end, but as I stood up to make it I stepped on a dog's tail. The dog yelped, I swore, and after this things went better. After dinner they entertained us with a Victrola and Heine danced with the daughters, who were rather like young elephants, but when morning came the chill had set in again and we were offered nothing in the shape of breakfast.

An hour brought us to "San Salvador," where we were able to buy fresh milk. Heine said that he was going to try to beg, borrow or steal a horse, so Chadwick and I went on ahead, leaving Heine with the Indians. Two hours later we came to a house on the far side of a narrow, but deep creek. The only way of reaching it was by a narrow tree-trunk twenty feet above the water. It is true this bridge had a bamboo handrail on one side, but this became horribly wobbly towards the centre. Chadwick, who hates these bridges, went some way round to avoid it, and I was sorry I had not done so, too, before I was half-way across. A woman in the house gave us water. She told us that about a fortnight previously an Evangelist with an elderly companion had passed that way, that the old man had disappeared, and it was thought a jaguar had taken him. Afterwards I heard that the old man had contracted with four Indians to carry him, but that they had mutinied and left him. I think it is likely that he was drowned in one of the swift streams, so many of which we had to ford.

Travelling became very bad indeed. The track had been ploughed by cattle, and at every step we sank knee deep in sticky mud. We crossed dozens of rivulets, scrambling up steep, clay-sided banks and becoming plastered with mire. I learned some jungle tips, one of which is that it is better to sit down in the mud than to try to save oneself by catching at tree-trunks or bushes. Most of the trees have protective thorns for six to ten feet up their trunks, while the bushes have small poisonous thorns that make festering sores. At three in the afternoon we overtook a party of Indians, some dozen men, women and children, from whom we bought a couple of bowls of *chicha*. It tasted excellent, something like butter-milk. We were hungry, having had nothing but a glass of milk all that day. The women and

children of this party seemed to be carrying bigger loads than the men. I saw one small child trip and fall on her face, and she was unable to rise until her load was lifted.

At four we reached the Government rest house at Las Palmas. It was nothing but an empty and ruinous shack. Our friendly Indians made a fire and cooked a little *yuca* for us. It was only about the bulk of two potatoes, but all they could spare. We were very wet and cold. Chadwick was completely done in and the leather of his boots was torn to shreds. I was wearing *alpagatas*, which are canvas boots with rope soles, and wear better for this kind of travelling than leather. True, they were constantly getting full of mud and sand, but there were plenty of streams to wash this out. At six there was still no sign of Heine or our men; then I saw smoke rising by the trees about half a mile away, and climbing the hill, saw a house. Chadwick was too tired to move a step, so I started off for it alone, but darkness had already fallen and I could not find my way across the intervening streams. In the end we slept by a fire under the shack. It was a wretched night. I had no coat and my shirt was in ribbons. It was bitterly cold, and while one side was roasted, the other was frozen. Needless to say, neither of us got much sleep.

It was nine the next morning before Heine at last appeared. He told us that the Indians had gone off hunting and generally wasted time. He had forced them to keep on the move until darkness fell, but had been unable to catch us up. Anyone who does not speak their language is absolutely in their hands. Most of them understand Spanish, but not unless they want to. Too much force or bullying results in their dumping their loads and deserting. When they arrived I read them the riot act, threatening to stop their allowance of *cachasa* if they played any more tricks. I resolved not to let them out of my sight in future, and at night to take away their *machetes* and other possessions, which they would be loth to lose by deserting. Then we fried a big dish of sausages and bananas and we had cheese and dozens of cups of tea. Chadwick threw away his ruined boots and put on riding-boots, but these were very heavy

to walk in, especially as they were all the time full of mud and water.

At eleven we were on the trail again, which lay past the house I had seen the previous night. The Señora called us in and gave us a glass of milk, and was quite peeved because we had not come across the night before. I wish I had! At three in the afternoon we reached another *tambo* at a place called Suntayaco, which was an empty shed with a raised floor and no walls, standing in a clearing. We were glad to make an early halt. We had a bathe in the river and a general clean up. Very necessary, for we were caked with mud. A heavy thunderstorm broke, but passed quickly, then all the men went off with wooden harpoons and dynamite to fish. Three more *chicha* and food carriers had come along, and three other Indians carrying the mail, which made nineteen Indians in all. In quite a short time they returned with half a dozen fish each. The fish weighed about a pound apiece, but proved to be very poor eating. We had to fall back on a couple of tins of pork and beans with fried bananas and, of course, gallons of tea. After the previous night's discomfort Chadwick and I were thoroughly happy to have a bed and blankets once more.

It hardly ever stops raining in these hills, and on the following morning it was coming down in torrents, and the trail became an absolute quagmire. It was constantly blocked with fallen trees which we had to climb over or to walk along. To make matters worse, the deep mud was full of roots which cut our feet. In places we were actually up to our waists in slime. Heine and I went ahead, and at half-past ten reached another resthouse where we waited. We saw a small *hacienda* on the far side of the stream where we were able to buy some *yuca*. Chadwick arrived with the Indians an hour later. He was looking very done. He had strained a ligament in his knee and this was causing him a lot of pain. He told me he would have given up had he not known the impossibility of such a course. Chadwick is six foot two and a half, and it would have been a hard job to get any Indians to carry him. They dislike carrying people, and I cannot say I blame them. I sometimes wondered what would happen had either of us broken a limb.

We made porridge and ate the *yuca* and some *grenadillos* that Heine had been able to buy, and after resting a couple of hours set off again. The Indians had told us that we were only two hours' march from another *tambo*. Sure enough, two hours later we came within sight of it, but I was behind the Indians and just as I came within sight of them they started off again. I had hardly breath enough or energy to even swear. Hill after hill we climbed, the trail getting worse at every step until, at half-past five, we reached Partidero del Peupo, an inhabited shack into which we fell, quite exhausted. The owner was very civil, and gave us lemonade and fresh fish for dinner, which we reinforced with the last of the sausages we had brought from Napo, and with a stiff tot of *caña*. The men told us that our journey on the morrow was to be over a worse trail and longer, and with this cheering thought in our minds we went to sleep. The Indians wanted to make an early start, so we were up at half-past four, and after porridge and tea got away at dawn. During the night there had been very heavy rain, and shortly after our start it came on again in torrents. The Indians made rough umbrellas out of leaves to cover their burdens and themselves. Up hills and banks, steep as house roofs, over tree trunks and roots, along the beds of rushing streams, across quagmires, the trail so faint that even the Indians themselves were sometimes at fault, and a continuous downpour the whole time! It was a nightmare journey. Every rivulet was a torrent in which one false step meant being swept away. Once I went on a little ahead, and suddenly found I had lost the track. I cast around but could not find it. It was a most unpleasant and hopeless feeling, and I had a most uncomfortable half hour before I suddenly saw the train of carriers coming along.

In one place a tornado had flung such a mass of great trees across the trail that we had to climb among the branches to a height of thirty feet above terra firma. My *alpagatas* finally fell to pieces that afternoon, and I walked bare-foot for four hours, hoping each minute that we should arrive at our destination, and all the time feeling that I could not go much farther. Then they told me that there

was still at least an hour and a half to go so, opening my kit sack, I got out my only pair of shoes and dry socks. What a difference it made to be able to walk without pain! By bad luck three hundred yards farther on we came to a rushing torrent, waist high, which we crossed chain fashion holding hands. At six o'clock we reached a place called Mera, and considering that we had walked over the most difficult country under the worst conditions for twelve hours on end, we finished up remarkably fresh. We had been recommended by Brown to the house of a Señora Ramonez. She was a kind, motherly old soul who at once made us hot coffee and insisted that we change our wet clothes. That night it was bitterly cold.

On the morning of August 21st the Indians left at a very early hour, a sure sign that they had been pilfering. Sure enough we missed several small articles, such as a pair of pliers, a rope, and a shirt of Chadwick's which had been hanging up to dry. We arranged for the hire of three saddle horses and pack animals to take us to Pelileo, which was a two days' journey. We were to pay ten *sucres* for each animal. We spent the day drying and repacking our kit. My feet were badly blistered and very sore, while the hands and legs of all three of us were swollen from poisonous thorn scratches.

Mera is a tiny village high in the hills, standing on the bank of the River Pastasa. It has a telephone and roads of a sort. Coffee, sugar cane and bananas are the principal crops. At six in the evening we had a surprise visit from seven gentlemen armed with big revolvers, who asked to see our baggage. I enquired what was contraband, and was told only alcohol and tobacco. This was a relief, as I expected they might make trouble over our Browning pistol and shot gun. Although we had crossed the frontier several hundred miles back, this was the first Customs examination.

CHAPTER XXIII

A COMPARATIVELY CIVILIZED CHAPTER

WE were all ready to start at six o'clock on the morning of August 22nd, but, needless to say, the animals did not arrive until nine. Before leaving we gave Señora Ramonez our camp outfit, saucepan, kettle, plates, forks and the like. The good lady had looked after us most kindly and had washed and ironed our muddy garments. The muleteer said it was too far to get to Baños that day, and suggested we should stay the night at a place called Mirador.

The road was bad and stony. It lay alongside the Rio Pastasa, and we climbed steeply for many miles. The scenery was magnificent. My pony was a brute. It had a nasty habit of biting, and was also cattle shy. In a very narrow place I met four oxen carrying wine barrels. The pony turned and tried to bolt, and it was not until I had blindfolded him with my *poncho* that I could get him past. At two o'clock down came the rain. As I have said before, it is nearly always raining in these mountains. At half-past three we sighted Mirador. Nothing but a tiny shack standing high on a muddy hillside. This was the " hotel," and we had discussed whether or not to wire for rooms !

There was only one small room, but things turned out much better than we had anticipated, for we were given an excellent dinner of chicken, cabbage, eggs and large bowls of hot milk. For this, our lodging and more milk in the early morning we paid ten *sucres*. The muleteer asked overnight if we would object to an early start. Since our sole ambition was to get to Quito as soon as possible and see our letters, we agreed to leave at three. I smiled to myself, as I had never known any muleteer start at the time he had promised, but to our great surprise we were roused

punctually at three, and, after the mules had been loaded, were on our way by four-thirty.

A fine drizzle was falling and it was intensely dark. The rocky road was strewn with stones and the going very bad until, about five miles from Baños, we came to a better road which is being constructed by the Leonard Exploration Company. At ten we arrived at Baños, which is a small village lying in a fertile valley. My wretched pony was so tired that it lay down in the street, so we gave the animals a big bundle of forage, while we breakfasted on fried eggs and coffee. Afterwards we walked out to see the hot sulphur baths. Mineral springs, also springs of fresh water, are in the same place.

We lunched at Baños and did not leave until one, so as to give the horses as long a rest as possible. No one could tell us how long it would take us to reach Pelileo. We were told all times from two to four and a half hours, each man reckoning by the speed of his horse. The road was fairly good, but our weary animals were only able to crawl.

Every inch of the valley up to the tops of the hills was cultivated. Low down, sugar cane was the principal crop, and I noticed that they used oxen to turn the crushing mills. We passed many llamas on the road, and saw a sick man lying on a camp bed with long pales under it, waiting to be carried by Indians to Pelileo. I had to walk most of the way, a tiresome business, because the pony was not used to being led; consequently we did not reach Pelileo until half-past five. Above the town rose a magnificent snow-capped mountain shining in the sunset.

There is a motor truck which runs up the railway line from Pelileo to Ambato, but for some reason it was not available. The train only runs once a week, so we arranged for three fresh horses for the morning, keeping the same muleteers to carry our kit. The hotel, called "The Oriental," was a primitive place, which seemed to be run by a small negro boy who waited at table, attended to the room, and to whom we paid the bill—thirteen *sucres* in all.

Next morning we got away soon after eight and although the road was unmetalled, it was the first we had found for a long time on which it was possible to trot and even gallop.

Three hours' ride among richly cultivated fields, divided by hedges of cactus, brought us to Ambato, where we lunched at the Hotel Vivero, and hired a big Studebaker car to take us the eighty-one miles to Quito. At the hotel we met a Portuguese named Bernado Diez, who started talking to us and was careful to inform us that he was an explorer. He was immaculately got up in riding boots, red tie, cowboy Stetson, pearl handled revolver, with a lot of ammunition in his belt. Everything about him looked as if it had just arrived from the shop. I found that he made his way and his living by selling picture postcards of himself. There are plenty of explorers of this type in South America.

The trip in the car to Quito was the most terrifying experience of our whole journey from Cuzco. The lunatic who drove us did the journey in just under three hours over a mountainous road, with hair-pin bends, and full of donkeys and mules. He took every corner at top speed, and on the wrong side, and why we were not all killed I cannot imagine. I was never more grateful than to arrive unsmashed, but very ragged, dirty and disreputable at the Hotel Metropolitano at Quito.

We had no Ecuadorian money, but I had a wad of Peruvian pound notes, which I flourished in the hotel proprietor's face and so induced him to pay the chauffeur and lend us enough to carry on until the bank opened on Monday. We were agreeably surprised to find such an up-to-date hotel. The rooms were well furnished, each with bathrooms, hot and cold water, and telephones. The food and attention were both excellent. What was even more pleasant and surprising was the cheapness. Rooms six shillings a night and meals two and a penny a time. No extra charge for meals served in one's room, while the morning paper was pushed under the door at six-thirty with " Good Morning " stamped on it and " FREE " ! As is common in America, one's boots are cleaned by boys in the streets, never in the hotels, and a wonderful job they make of it. I had only one pair of old brown shoes in which I had walked part of the way through the forest, and I had them cleaned before I went off to buy another pair. When the operation was over I almost imagined that I was

wearing the new pair, and all for three-ha'pence! I was glad to be able to buy socks, collars, handkerchiefs, a decent hat and tie. It was pleasant to feel civilized once more. There was a most modern bar at the hotel, where really good cocktails and whiskies and sodas cost only sevenpence, while afternoon tea and cakes could be purchased for sixpence. Quito is, I believe, the cheapest town in South America.

The country round Quito produces nearly every kind of fruit and vegetable, so food is plentiful as well as cheap. With the exception of the cinemas there were no public entertainments, no dancing, and no restaurants outside the hotels. But there were plenty of good shops, while the town itself is bright and cheerful, and the climate, although on the Equator, is pleasant owing to the altitude of 9350 feet. The streets, paved with concrete, are picturesque. Indians of various tribes are plentiful. The street sweepers are all Indians. They wear wide white trousers, scarlet *ponchos*, funny little straw hats, while their long black hair is either plaited or worn loose down their backs. Others wear enormous hats like Mexicans. The white women carried more paint on their faces than I ever saw on an Indian's whole body. There are still a few who wear the old Spanish black lace mantilla, and very becoming it is.

There are many interesting old churches. One, La Compania, belonging to the Jesuits, is quite overwhelming in its richness, and all were more carefully looked after and preserved than those we had seen in Cuzco. There was, however, hardly any trace of the Incaic period, for which Cuzco is unrivalled. Some of the houses are good examples of the Spanish Colonial period.

August 25th was Sunday, so we could not get the letters and news for which we were longing. We slept most of the day, for we were all feeling the reaction from the journey. In the afternoon we went to the cinema, after which we went straight to bed again. The Consulate did not open until ten on Monday morning, then at last we got our letters. The Vice-Consul told us that our friends had written, asking the authorities to find out what had become of us, and that they had made enquiries from Lima and Iquitos. Our mail was disappointing, only business letters,

none from home or any news about the Company. There was no letter about the luggage we had left at La Paz.

We amused ourselves by visiting churches and taking photographs. I found walking with thin shoes on hard pavements far more tiring than tramping through the forests. Kohan, the Consul-General, asked us to dine with him on Tuesday night. He gave us an excellent dinner. A very different reception from the one we had had at Iquitos. Kohan was anxious for us to meet the Minister of the Interior to give him information of our trip.

Next day we started packing, as we had decided to leave for Guayaquil in the morning. We had no luck in trying to sell our camp beds, saddles, or shot-gun, although we asked only a quarter the price we paid for them. On the morning of August 30th we said good-bye to Heine, who was going on through Colombia, and got the train at eight o'clock. It was a switchback journey. First we climbed to nearly twelve thousand feet at Cotopaxi, catching a glimpse through the clouds of the magnificent peak of the volcano ; then down three thousand feet to Ambato, after which came a fresh climb to Urbina, the highest point. At six in the evening we arrived at Riobamba. Provisions in the form of fruit, roast guinea pig, cheese, sausages, bread, milk and hard-boiled eggs were to be bought at the various stopping places. I purchased a large basket of Mandarin oranges for sixpence and ten pounds of strawberries at a penny a pound, but neither of these fruits had much flavour. Just before reaching Riobamba we were lucky enough to get a glimpse of that vast mountain, Chimborazo, through the clouds which usually shroud it. Its beauty is a thing that cannot be expressed on paper. The hotel at Riobamba was clean and good, yet not comparable with the one at Quito.

The train started again at a quarter to seven in the morning. From Riobamba the line drops from nine thousand feet to sea-level at Guayaquil, and is most wonderfully engineered. In the Alausi Loop, and again at the Devil's Nose, the train, in a V-shaped switchback, hangs over tremendous precipices. The gradient is very steep and brakesmen were stationed on the roof of each carriage with long crowbars to manipulate the brake wheels.

The country all along the line was prosperous-looking and well cultivated, but the cocoa plantations were in a bad state owing to the disease which had attacked them some years earlier. Although the Government had offered a large reward for a cure for the disease nothing seemed to have been done and the trees were overgrown, while the ground was covered with weeds. Lower down were large fields of sugar cane and bananas.

We arrived at Guayaquil at six in the evening. All the hotels were full. We could not find room at the Ritz or the Cecil and were driven to a place called " The Victoria," which was filthy and infested with ants. Fortunately, nexs day we were able to move to the Cecil, where the food war quite good. Being Sunday again, we had to possess out souls in patience for our letters and news of our boxes. Chadwick and I calculated that the trip from La Paz, everything included, had cost slightly under £150 apiece. This can hardly be called expensive for nine months' travelling.

We were lucky to arrive at a good season of the year, for Guayaquil, being at sea-level, is, of course, much hotter than Quito. The nights, however, were cold. The rainy season is from December to March, and then there are plagues of insects, poisonous flies, mosquitoes and, worse than all, crickets (*grillos*). I saw photos of walls quite black with them, and ghastly things happen in the kitchens while food is being cooked. There was a lot of bubonic plague about. Some American doctors had started a campaign against the rats, but the inhabitants were too apathetic to give much active assistance.

It is a bright little port, but the buildings are mostly bamboo covered with plaster and cement-wash. The main street is wide and there are plenty of high-powered American cars, but there are no roads out of the town except to Ancon, and that is only a dirt track which cannot be used in wet weather. There are two fairly good cinemas besides cheaper ones, and every child sells lottery tickets. I was amused to see people buy chunks of ice and drag them home on a string just like a dog. The metal coins are a nuisance, for the five, ten and fifty-cent pieces are all

about the size of a sixpence and very difficult to distinguish. Even the Ecuadorian complains.

The town is built in squares, but since the houses are mostly of wood, a big fire might easily do an enormous amount of damage. There is a large and very efficient fire brigade, six thousand strong, all volunteers. I believe, however, that the firemen escape a certain amount of military service by joining. They dress in white trousers and scarlet jackets, with big steel helmets shaped like those of the old Spanish soldiers.

A comic bull-fight was advertised, and I went. One man was made up as Charlie Chaplin, another as a fat comedy merchant, and a third in a scarlet page-boy's uniform. A bull was led into the arena and with difficulty induced to make half-hearted charges. Then another bull took its place. Several banderillos were stuck in it, which only made it trot pathetically to the door by which it had entered. A third bull was brought in and I saw the fat man hurt through his own carelessness—and came away.

A day or so later a real bull fight was advertised, and I got a good seat between an excitable Spaniard and an Ecuadorian. The place was crowded. Many of the young women wore gorgeous shawls, which they draped over the railing in front of them. Six bulls were killed and the enthusiastic fans beside me explained the technique of the game, and on our return to the hotel gave practical demonstrations of " veronicas " and the exact positions in which the feet and body should be. There were no horses or I think I should have hated it, though my friends pointed out that it was more merciful to finish off the worn-out nags in the bull ring than let them drag out a miserable existence for years in a cab. On another night I went to a boxing match, not expecting great things. To my surprise, I saw some of the gamest fighting imaginable, but the decision was given to the local favourite, who was well behind on points.

That night, in the hotel, I came upon a young Englishman apparently trying to kill an Italian. He had him by the shoulders and was shaking him with extreme vigour.

The Italian had challenged the Englishman to a drinking

bout, but had misgauged the potency of Scotch whiskey, and the Englishman was trying to sober him enough to get him home. After half-drowning him in a wash-basin to cure him of the idea that his enemies were lurking with drawn knives behind a curtain in a corner of the room, we took him home and left his wet, dishevelled body on the bed.

All this time there was no word of our baggage, and Chadwick decided to wait no longer, so booked a passage home. He had not much luck, for the ship ran on a sand-bank at Manta and was aground there for a week.

On September 30th, a party consisting of five Englishmen and some Ecuadorians, went up the river in a launch to shoot alligators. Two were hit, but sank, and as they take twenty-four hours to come to the surface again, we got none. The Ecuadorians blazed away at every bird in or out of range. A useless slaughter, which spoilt an otherwise pleasant picnic.

On October 10th I at last had a cable informing me that the baggage would arrive on the 26th. Meantime, I made arrangements to pay a visit to the Anglo-Ecuadorian oilfields at Ancon. On the night of the 21st I boarded *El Buaro,* a motor-tanker belonging to the Company. I was a guest of the Company. She was quite a nice little boat. The Captain spoke excellent English and the engineer was an Englishman. It was like being on one's own yacht. There was nothing of interest along the coast, which, like most of western South America, is unfertile. There are dangerous rocks near the point of Salinas, and many ships have been wrecked there. Years ago a Spanish galleon laden with bullion, said to have been taxes collected down the coast, was either wrecked here or, according to another story, taken by pirates and sunk by her Captain rather than surrender. Many coins, both gold and silver, have been picked up in recent years on the beach, especially after storms. One man told me that he actually had seen the wreck at a very low tide.

The voyage took fourteen hours and we landed at La Libertad at half-past four in the afternoon, then I got a mail-car to the camp at Ancon. I spent fifty minutes of

agony on a terrible road. The chauffeur's driving was appalling. The car bucked like a broncho. The mail-bag, my suit-case and I played "General Post" all the way. These South American chauffeurs commit every conceivable crime, accelerating round corners, jamming on the brakes suddenly and failing to sound their horns. This one had the one virtue, that he did sound his horn, and that saved a smash three times.

Thompson, whose guest I was, made me most welcome. A cheery soul named Black was sharing the house with him. Thompson took me for a short run round the camp and then to the Club. Dr. Sheppard, the chief geologist, took me in hand and explained about oil. Incidentally, I learnt an interesting thing about the earth-eating tribes of whom I had heard on my journey. I was under the impression that earth-eating was a disease, but it appears that a European cure for certain illnesses is a form of China clay that absorbs some two hundred times its bulk of impurities, and which is on the market under the name of Kaolin. The empirical savages found out its properties long before we did.

The wells, of which there are about two hundred, vary in depth from a few hundred to four thousand feet. Both rotary and percussion drills are employed. The rotary drill has the advantage of being much faster than the other, but the disadvantage of boring right through the oil strata, and also, at times, of getting very much out of plumb. Percussion drilling is slower but surer. Some of the wells are described as "flowing," that is, they do not require pumping. The yield per well rises as high as two hundred and fifty barrels a day. About seven barrels go to the ton. The oil is pumped to La Libertad, where the tankers pick it up from a flexible hose leading from the pumping house to buoys floating in the sea. There is no fresh water in Ancon and all water for the boilers, drinking, etc., is condensed from sea water, a very expensive process and, incidentally, bad for the boilers. As a compensation, there is plenty of natural gas which is used for heating and cooking.

I returned to Guayaquil by a cranky motor-bus, a very

rough and uncomfortable ride. True to time, the *Imperial* arrived on October 26th, and I saw by the manifest that the baggage had actually arrived, but since it was a feast day, nothing could be done to get it until the following Monday. Even then there was a hitch because one box had no number painted on it. For this I had to pay a fine of twenty *sucres*. Then came the Customs examination. Every single thing was hauled out and carefully examined, including the skulls, pottery and other junk which I had collected in Bolivia.

Talking of curiosities, I had been long trying to get hold of one of the Jivaro mummied heads. A man came along with one, but he wanted two hundred and fifty *sucres*. One hundred *sucres* would have been a fair price, so I refused to buy it. There is a story that some time ago, before the secret of reducing these heads was generally known, some Germans did a thriving trade in them. They robbed the cemetery. One day, however, a buyer, a friend of whom had died in Guayaquil, recognised the head which he was offered by a wart on its cheek. The Germans went out of business quickly.

Money was getting short and I was anxious to get on to some British Colony. A friend had given me introductions in Belize in British Honduras, a country I had always wished to see, so I set about finding a ship to take me there. There was nothing going direct so I booked an intermediate passage to Cristobal on the *Santa Cecilia* of the Grace Line. Before leaving I got tangled in Red Tape. First I had to deposit £20, then to produce a vaccination certificate; thirdly, I had to get a permission to leave the country, buying a stamp in one office and getting official signatures in another. All very irritating, and I wondered what happened if one had to leave in a hurry.

On the evening of November 4th I invited some of my friends to a farewell dinner. We had a wonderful party. Then we got a launch and went off to the ship. When the gang had departed I found they had left me an apple-pie bed, and in it a parting present in the shape of a bottle of whiskey.

British Honduras and Guatemala

CHAPTER XXIV

A TRIP INTO THE MAHOGANY FORESTS

THE *Santa Cecilia* was a cargo boat, and her passenger accommodation was poor. The cabins were fair, but the food was served in an alleyway, and there was nowhere to sit, even on the unshaded iron decks. There were two Peruvians in my cabin and eight other passengers. We travelled slowly up the coast arriving at Manta on the afternoon of November 6th. Near this town is one of the chief centres of the Panama hat industry. We took on coffee and *tagua* nuts.

Bahia was our next port and on the night of November 7th we anchored outside Esmeraldas. The reefs were too dangerous to enter a port after dark. On November 9th we arrived at Buenaventura in heavy rain. I had not seen a drop of rain for three months. I went ashore. It was the most filthy town I have ever seen, yet the third biggest Columbian port. There was a red light district, full of dance halls, drinking dens and little rooms with seductive beauties of all ages and colours. Huge fat negresses with gold teeth, copper-coloured half-castes and white women. Every room blared a gramophone and the dance halls and jazz orchestras added to the din. Trade was brisk—sitting in one of the dance halls I noticed one of the more attractive girls " unlace her sandals " eight times in an hour and a quarter, thus earning 16 dollars plus her percentage on the drinks sold. Albert Londres mentions four hundred and two " encounters " in a week, in *The Road to Buenos Aires*, about the same average.

The ship had a very polyglot crew, Americans, Peruvians, Norwegians, Danes, Jamaican and Hawaiian niggers. On November 10th one of the three boilers went out of action and it was eight in the evening before it could be repaired. This delayed us badly. By this time all the cabins were full

and some of the new passengers were pretty horrible. An American in the next cabin to mine was nearly asphyxiated by the stench of his unwashed companions and decided to sleep on the hatch. Luckily for him the Fourth Officer gave him a bunk in his own cabin. My stable companions did not smell but the cabin was appallingly stuffy, so, waiting my chance, I regulated the electric fan so that I got the full benefit from it, and with a pair of pliers fastened it so tightly that the others could not alter it—an old traveller's trick.

Owing to the accident to the boiler it was late on November 11th before we reached Panama. I wandered up the town to an expensive cabaret quite pleasantly decorated, with a negro jazz band that nobody seemed to be dancing to. I had been there less than ten minutes when a waiter tried to frisk away my half-finished drink ; then the head waiter came up, offering to ask one of the girls to some and sit at my table. I thoroughly enjoyed telling him what I thought of the Cabaret, the orchestra, the girls and himself. Then I walked back to the ship. There were many good shops, and the town looked bright and prosperous —brimming over with well-dressed negroes and negresses.

Next morning we were the first boat of the day to go through the Canal. It is a truly marvellous engineering feat. Four locks up from the Pacific, then forty-seven miles of canal and lake, then again three locks down to the Atlantic at Colon, where we arrived at half-past three in the afternoon. At Colon I got a room at the " Astor " hotel. A poor place, yet preferable to the ship. I arranged with the United Fruit Company to get a passage to Puerto Barrios for the 17th. I found the waiting very dull. There was nothing to see and less to do. I went to several cinemas, and it was in Colon that I heard my first talkie. The orchestral reproduction was excellent, but the voices were hollow, while the strong American accent did not make it easy for me to catch all that was said. I had to pay fifty dollars for a first-class ticket on the *Heredia*, a pretty costly business considering the voyage took only three days. The alternative was a deck passage at seventeen dollars, but I had had enough discomfort for the present. The boat

itself was quite comfortable. I had a big double cabin to myself, and the food was good. At meals one was given the menu from which to write out the order—this system has the advantages of avoiding mistakes, and also serves as a check on the steward and a guide to the tastes of the passengers. The passengers were few and uninteresting, so I had plenty of time to read up the books with which I had provided myself, on Central America.

I arrived at Puerto Barrios on November 20th (770 miles from Colon). The place belongs to the United Fruit Company, who ship out vast quantities of bananas and coffee from Guatemala. I found the Hotel del Norte quite decent, but the charge was four and a half dollars a day. Puerto Barrios stands on the edge of the sea. Some of the houses are actually over the water. Green grass and trees grow down to the very edge of the tide. At the hotel I met a young American travelling for Cleveland tractors, who was in his way to Belize. His name was Neff. I was thankful to have someone to talk to, not having spoken to a congenial soul since leaving Guayaquil. Neff and I booked our passages for Belize on the *Herron*, a small motor coaster, and arrived there on the 23rd.

We got rooms, in fact we were the first guests at the new Palace Hotel in Belize. At ten, when the bank opened, we went to get our letters. Afterwards Neff took me to see the heads of the Belize Produce Company. Then our fates were decided for us. We were taken out to lunch, introduced to everybody, made honorary members of the golf and polo clubs, and generally treated to every sort of gaiety. It had been arranged that Neff was to go up to Hill Bank where the mahogany is cut, so as to get an actual idea of the conditions under which his tractors had to work, and he kindly invited me to go along.

On Monday morning we boarded the *Winny*, a small motor-boat, which took us to Lamonal, where horses were waiting for us, with an Indian guide who wore a *machete* as long as a cavalry sword. The forest was mostly under water, but we rode until it became too deep, then climbed out of our saddles into a rotten old dug-out canoe, green and slippery. It was a work of art dismounting into it without

upsetting the crazy craft. After half an hour in this our guide said that we had arrived at the spot where a launch would pick us up. But the wait was long. We had to spend an hour and a half in this cockleshell, almost afraid to move to brush the mosquitoes away. Then the launch, which had had a breakdown, picked us up and we crossed the New River Lagoon, twenty-two miles long, to Hill Bank, where the staff have quite decent quarters and received us most hospitably.

In the morning we went off on a small railway to see the conditions under which the tractors had to work. It appears that there are only about seventy days in the year when the ground is dry enough for hauling. The rest of the time is spent in making tracks to the trees and felling them. They average only about two trees to the acre.

In connection with felling mahogany, here is an extraordinary fact. The trees must *not* be cut at the time of the new moon which, apparently, has some influence on the sap. Logs cut then split in a short time, and worms get into them. The Indians will not even cut palms for the roofing of their huts at the time of the new moon because they say that insects get in and eat them. This, mind you, is not a superstition, but a proved scientific fact.

The logs are hauled out, floated down the river to Corazal, then round by the sea to Belize where the mahogany boats pick them up. Another industry of these forests is the *chicle*. *Chicle* is the sap bled from the sapodilla tree, which is used in the manufacture of chewing gum. There is little agriculture in British Honduras. The excessive rain during the rainy season, and the intense heat and drought of the dry, make the growing of crops a difficult matter. Further south, however, near Stann Creek, a grape fruit industry is sprung up, which promises well. The New River Lagoon is full of tarpon, for which the fishing is best in April and May.

We spent two days with the mahogany cutters, then the launch took us down the lagoon. We picked up the same leaky old dory, and at half-past ten arrived at the point where the motor-boat was to meet us. Instead of the motor-boat we found a small dug-out canoe with a four horse-

power out-board motor. When Neff, I, the two men and our suit-cases were in it, we were packed like sardines and the water was within two inches of the gunwale. It was a difficult journey, for we had constantly to stop the motor to clear the weeds which tangled the propellor. It was eight in the evening before we reached Belize, very stiff, very tired and very hungry.

CHAPTER XXV

THE LEAST-KNOWN BRITISH COLONY

BRITISH HONDURAS is one of the least-known colonies of the British Empire. Its population is about forty-eight thousand, while Belize, the capital, has twelve thousand people. The first recorded settlement was made in 1638 by a party of shipwrecked British sailors who were afterwards joined by settlers from Jamaica. The coast is studded with *Cays*, small sandy islands which make navigation difficult. This was the reason why, in early days, Belize was a favourite centre of the buccaneers, the most notable of whom was Wallace, the Scottish corsair chief. It is said that Belize is is either a corruption of the name Wallace or derived from the French *balise*, meaning a beacon. Spain made many attempts to annex the colony, and in 1718 a Spanish force penetrated as far as Spanish Lookout on the Belize river, where they erected a fort. In 1754 they attempted a more serious invasion, and reached Labouring Creek where they were routed by the settlers and their negro slaves. Matters went from bad to worse. The Mother Country gave no help and in 1797 the settlers held a public meeting to decide whether they should make a final attempt to resist the Spanish forces or evacuate the settlement. A majority of fourteen votes was recorded in favour of resistance, so preparations were made for a fight.

In September 1798 a Spanish flotilla of thirty-two vessels carrying two thousand troops and five hundred seamen appeared off Montego Cay. To oppose them the settlers had one British Sloop, *The Merlin*, three local sloops and two local schooners, besides seven gun rafts. On land was a reserve force of two hundred regulars. Then followed the famous battle of St. George's Cay, in which the tiny British force, bravely helped by their negro slaves, put to flight

the whole Spanish flotilla. This battle ended the Spanish menace, and peace reigned until 1857 when the Chinchenha Indians invaded the colony from the north-west and there followed ten years of fighting, which was finally settled by the Third West India Regiment in 1867. Three years later Yeaiche Indians seized Corazal and attacked Orange Walk. This time fighting lasted for two years when the Indians were at last driven off and their leader, Canul, killed.

Belize is built at the mouth of the Belize river. It is a town of white bungalows, which might have been most picturesque, but the first thing one notices is that none of the residents seem to worry with plants or flowers which should grow in profusion, and that most of the bungalows sadly lack a coat of paint. There are no trees to relieve the glaring whiteness of the streets.

There are two mediocre hotels in which, as in most tropical hotels, the rooms are open at the top and most of the wall space is just shutters, the result being an unpleasant lack of privacy. Apropos of this the following story was told me :

A newly married couple occupied one of the rooms and next door were two American drummers who heard the bridegroom say : " Darling, you are so beautiful that I would like to have you gilded and placed upon the Capitol at Washington." A minute later came a peremptory knock at the wedded ones' door.

" Who's there ? " called the startled bridegroom.

" Two gilders from Boston," was the answer.

The town was a centre of the boot-legging industry, schooners came in to load cargoes of liquor that were taken up to New Orleans and other places where fast motor-boats took off their contraband and ran it ashore.

To make the handling easier, the bottles in their straws were sewn into sacks and the wooden cases discarded. One Captain to whom I had been talking, suddenly looked at me keenly and said :

" Now I remember you—you are the —— who gave me sixty days in New Orleans, last time I was caught ! "

And nothing would persuade him that I had never been

to New Orleans. He merely said he knew I had to do it as it was my job !

Trade was negligible and there was little for some of the inhabitants to do but drink and gossip. Drunken people are a nuisance in a lattice-work hotel !

One night Robson and I were sitting quietly in my room, and were joined by a young man staying in the same place. There came a message to Robson that a friend of his was too much in liquor to go back to his ship. Just when we got him to bed, the man in the opposite room entered and flopped on the floor, so he was put on his bed, where he remained, snoring loudly.

While this was happening, the first young man had been helping himself to more than his weak, good-looking head could stand, so he was propelled none too gently down the passage and locked in his room.

This young man had been sent abroad for his good and the peace of his family. He was an obese, good-natured lump of flesh, completely soaked in alcohol. On the first day of his arrival he disgraced himself at the Club, and was forcibly ejected and was now awaiting friends to take him out to a mahogany camp, where he could get no liquor.

Next day it was thought a good idea to take him out to Sergeant's Cay for fresh air. The man was spineless; no insults or ignominious treatment seemed to rouse him, he was pushed on to the motor-launch in a very dazed condition and laid and tied to a seat, where he slept peacefully.

As we neared the Cay we all undressed and jumped in for a swim. He, too, managed to get unclothed and balanced uncertainly on the edge of the boat before he fell in. To my astonishment he swam well and appeared quite sober in the water, but when he reached the shore he was quite unable to walk !

He was a rich young man, and the day before going up into the bush, was horrified at the idea of having to pack his own suit-case; he had never done such a thing in his iife; his great brain-wave was to ride through the bush ln silk pyjamas.

" They would be so cool," he declared. Only gruesome,

but true, stories of thorns tearing them off his back and scoring his tender flesh dissuaded him.

The wet season in this part of the world is very wet, but for the rest of the year the drought is complete, and in Belize the water supply is a great problem. The river is nothing but an open drain. Water for drinking, cooking and washing is obtained by collecting rain-water from the roofs into big storage vats, and it is not pleasant to imagine the collection of dirt, dust and insects washed down the roof into these vats. True, the Government decrees that these must be screened with wire gauze, but in this damp climate the gauze rusts in about six months and is seldom renewed. Some residents keep in their tanks a few fish of the kind known as *Grana*, or Billham. These feed upon the larvæ of mosquitoes, and will live with very little light and no artificial feeding.

In view of this shortage of water, the manager of the hotel had a bright idea of using river water for the flushing of the lavatories, and accordingly laid down a second line of pipes. The mechanic, who had apparently " rum taken," connected them wrongly, with the result that a shower taken by one of the visitors to the hotel will not readily be forgotten.

Owing to the damp atmosphere, one's clothes and shoes quickly become coated with mildew, and must be taken out into the sun and aired every few days. Mosquitoes are bad and a net must be used all the year round. There are two Clubs for Europeans, the Golf and the Polo. These face the sea, with a small strip of ground in front on which cricket, football and polo are played, and where there is a race-meeting twice a year. This flat space serves, also, as landing ground for the Pan–American Airways, whose planes come and go twice a week.

The great feature of Belize is the Cays, lying off the coast. With their white sandy shores and groves of coconut palms, they are pretty little places, and ideal as summer resorts. The principal one is St. George's Cay, the site of the famous battle, but this is ruined by hideous bungalows belonging to the richer residents. Some Cays belong to the Government and have bungalows which may be rented

furnished for a dollar a day. The fishing is excellent, indeed, this is one of the finest fishing grounds in the world and still practically unexploited. There are *barracoutas* of various species which, in spite of their ferocity, make excellent eating, king-fish, immense mackerel, devil fish, dog fish, flying fish, dolphins, tarpon, mullet, as well as grouper, grunt and snapper. That curious creature, the *manatee* or sea-cow, is found in the inlets, while in the rivers and lagoons are any number of alligators. I might here settle a question which not one person in a hundred knows except by reference to the dictionary, viz., the difference between an alligator and a crocodile. "The alligator has a short, broad head, fourth tooth (canine) of lower jaw bites into a pit instead of a groove in the upper. Union of two halves of the lower jaw is short. Hind limbs have no infringing membranes and toes are incompletely webbed. Confined to America except for one Chinese species."

Lobsters and crabs are plentiful. There are also conks, a species of shell-fish which makes excellent soup, stew or bait, and the pink shell-fish which is to be found on the mantelpieces of most seaside boarding houses in England. Then there are turtles, the snapper, the hawksbill, which is valuable for its shell, and the *hicatee*, which makes delicious eating. There are oyster-beds, which are shockingly neglected, and sponge-beds, which the Government have taken over and are trying to form into a paying industry.

Needless to say, the place teems with stories of buried treasure. This is only natural on a coast which was a haunt for pirates for so many years. On Calabash Cay silver has actually been found. Two or three years ago a party of Americans arrived in a yacht, hired negro labour and started digging on a Cay. One day they paid off their men and left in a hurry. It is said that they made a worthwhile find. Just before my arrival, a man went over to Half-Moon Cay with a gold-finding contraption. At a certain spot the needle suddenly showed violent agitation. The man and his companion dug frantically and unearthed a mass of old anchor-chains and iron!

All metals give out emanations and now geo-physical methods are being officially employed all over the world.

I spent a few delightful days on the coconut plantation of Bob Phillips at Long Cay, which is about sixty miles from Belize. At the time of my visit the coconut industry was suffering severely from the slump, and nuts were fetching only ten dollars a thousand. Each tree yields, on an average, eighty nuts yearly. Each nut, as picked, is covered with a thick green husk, which is split off by a primitive device, a spear-shaped steel instrument which is stuck into the ground. The husks provide the fibre for mats and rope. The nuts, when picked, are split in half, the meat scooped out and dried in the sun, is sold as copra. The young coconuts are full of milk, which makes a delicious drink, especially if mixed with a small quantity of gin. The palms take five to eight years to come into bearing. One thing struck me as very interesting. There was a quantity of peat on this Cay. I had always supposed that peat was confined to the colder regions of the earth's surface.

On Half-Moon Cay is a large colony of that rare gull known as the " Booby " bird. It is the only one in Central American waters and is preserved by the Government. The nearest " Booby " colony is off the coast of Jamaica. These gulls fly daily to Utilla, eighty miles away, to feed, returning in the evening. Fishermen can set a course by their flight. They get their name, " booby " from the fact that they disgorge the fish which they have caught, when attacked. There were also numbers of pelicans which dive vertically with extraordinary speed in pursuit of fish.

The return from picnics in the Cays usually provided some excitement. A party of ten of us in an open motor-boat ran into a sou'wester, and the fool of a boatman got off his course and headed for Stann Creek. Fortunately, one of the party, C. O. Taylor, discovered the blunder, but by that time we were running short of petrol. Then a big sea stopped the engine and we drifted helplessly. Big waves broke over us every moment. Perhaps there was no imminent danger but I could not help noticing how splendidly the women, whom we had aboard, behaved. Not a whimper from any one of them, either the young girls or their mothers, although they were soaked to the skin

and bitterly cold, while the dyes from their bags spread grotesque patterns, ruining their dresses. Fortunately, we managed to restart the engine and got in safely.

I have never been in a place where I found more hospitality than at Belize, and everyone who knows the town says the same thing. Taylor told me that the Carnegie Exploration people would be starting out again in January, that he was sure they would be glad to take me with them if I paid my expenses. I jumped at the chance, for I could think of no more interesting way of spending my time until I heard definitely whether the Sacambaya Company was coming out in March or not. Then I had a pleasant surprise. When in Iquitos, replying to a letter from my old friend, Jim Stead, I mentioned, quite casually, how good it would be if we could join forces and do something interesting together. Now I got a cable from him that he would arrive at Belize in January.

Christmas came, and with it a race-meeting. This is one of the chief excitements of the year, and the betting was fairly heavy. The races were not without incident. One horse was deliberately ridden on to the rails, and in another race I was amused to see the jockey lying back in the saddle and pulling for all he was worth. I should have enjoyed it more had it not been the animal which I had backed! At the meeting I was introduced to Dr. Gann, who has written so much on Maya civilization.

Christmas is a miserable time to a man in an hotel abroad. To my joy an invitation came from C. O. Taylor to spend the day with his wife and family, and a right good time we had, going on in the evening to the house of some other friends, the Schufeldts. New Year I also spent with the Taylors. Everyone was most kind and hospitable.

Early in January I met Captain T. M. Robson, who was going out after what is known as the Carmichael Treasure. He invited me to accompany him, and agreed to take Jim Stead and Herron, who had been one of our Sacambaya crowd. Stead had got into touch with Herron and the latter had cabled that he would join us, the arrangements being that each was to pay his own expenses. With regard to the treasure itself, I had no faith that we should find

anything, but the expedition offered a chance of seeing an almost unknown part of Guatemala. I was anxious, too, to see some of the Maya ruins and compare them with the Inca cities I had visited.

The story of the Carmichael Treasure is that in the year 1860 Carmichael, travelling up-country, saved the lives of two Indians. They were so grateful that they promised to show him where Montezuma had hidden his treasure from the Spaniards. This, they said, had to be done without the knowledge of the rest of the tribe, so Carmichael, with the elder Indian, set off on an alleged hunting trip and after many days' travel through the bush, reached a temple about a day's journey east of Tikal. This temple, Carmichael marked with a cross cut in the stone.

Robson first heard the story in a broadcast made in England by Dr. Gann. He got into communication with Carmichael's son and made an agreement with him that the three, Robson, Carmichael and Gann, were to divide the treasure equally. He was, therefore, unable to offer us any share in it, but he agreed to share anything else that might be found. I felt sure we should come across something and, as it happened, we did.

Robson, wrongly informed as to the seasons in Honduras, had arrived in November, only to find that owing to the rainy season, it was impossible to start before January.

Jim Stead arrived on January 5th, but Herron not until the end of February. In the meantime, Robson and I were busy getting out lists of the necessary stores and supplies. In any case we could not have started in January, because Robson had a bad attack of malaria, and also the rainy season lasted longer than usual. Then came my turn for a bad dose of malaria. I had escaped for nearly two years and believe that the cause was my failure to take the regular ten grains dose of quinine.

We met Muddy Esquivel, Dr. Gann's right-hand man. Racially, Muddy is a queer mixture, for he is half Spanish, a quarter Maya, a quarter Irish. He knows the "bush" thoroughly, and gave us excellent advice. He was most anxious to come with us, but Dr. Gann would not spare him. Speaking of mixtures, I suppose there is no other English

colony in the world, where the colour line is so indefinite as British Honduras. Many of the white residents show traces of colour, and in the lower classes there is every shade, from light brown to jet black. An interesting point is that white men live with coloured women and are not ostracised as elsewhere. The native population seem cheerful and clean, but there is a wide-spread belief in *obeah*, the juju of South Africa. No doubt this unpleasant belief, which in its worst form comprises human sacrifice, was originally imported from Barbados and Jamaica. I might end this chapter with a few of the trenchant proverbs common among Creoles:

When fish come from riber battam, an' tell you alligetta hab bellyake beleev am.

Cakroche neber so drunk fe (for) pass fowl yard.

Full belly tell hungry belly kip hart.

Wen cakroche make dance 'e no invite fowl.

Fisherman neber sa' he fish stick.

Pashant man ride donkey.

Fire out, puppy roll ina di ashes.

Han'some face an good luck no wark ina same road.

Put a fool in a mortar an' beat him an' beat him an' he come out the same fool.

When you quarrel wid you fren', den you know how much dem know about you.

Mek fren' wen you no need dem.

Dead hog no 'fraid fe (of) boilin' water.

When harse dead, cow get fat; when cow dead, mule larf.

Debil ole, but him no bedridden.

CHAPTER XXVI

BACK TO THE BUSH

JUST before Jim Stead arrived in January, Robson and I moved into an empty flat next to the house of C. O. Taylor, for which we paid twenty-five dollars a month. It was cooler, cheaper and quieter than the hotel. Robson had his boy, Marcial, and I took on a youngster named Martinez. This Martinez had been employed at the hotel and one day, when I had explained to the manager that his bill would have to wait for a couple of days until cash arrived from England, I sent Martinez down to the bar for a packet of cigarettes. He returned, saying they had refused to serve me. Naturally, I was not pleased, and started to dress in a hurry to go down and tell them what I thought about it. Five minutes later, Martinez came up again with the cigarettes and laid them on the table without a word. I asked him where he had got them and found he had dashed out and bought them with his own money. I thought a hell of a lot of this and later, when he said he wanted to come into the bush with me, I engaged him as servant to Jim, Ken and myself. Incidentally, my money arrived that same day and after paying the manager, I gave him a thorough dressing-down. Some of my friends, who happened to be in the next room, congratulated me and told me I had forgotten nothing. This was the real reason why I cleared out and took the flat.

The Carnegie expedition started early in February and were most anxious that we should all go together, since our destination was only twelve miles beyond their site of operations. Unluckily our permit had not yet come through and we could not move without it. It was not until the night of March 1st, that we embarked on a motor-launch called *Esperanza*, on the first stage of our journey. These

river launches are quite small and usually heavily laden. There was only just space in which to hang our hammocks. With us was an American, a cheery fellow, who had asked to be allowed to travel part of the way with us.

The river was not wide and averaged only six to nine feet in depth. The scenery was pretty, but monotonous. In places the stream was swift and the launch had to be assisted by ropes tied to trees on the bank and wound up on the capstan. There were plenty of birds, toucans, herons, egrets, waders, ibises, ducks, kingfishers and parrots. One night we had to moor up, as we were nearing rapids which could only be passed in daylight. On this occasion the crew went ashore and had enough drinks to make them talkative and forgetful of who might be listening. I happened to be awake and though I could not catch all they said, what I did hear was interesting.

One man maintained that bloodshed was wanted in Belize, another agreed, but observed that the white man had the brains and, until the black man had them, the white man would make and keep the money. They then began to discuss various people I knew, or knew of, and to tell one another what they would like to do with them. The details will hardly bear publication. I noticed that their animosity was directed chiefly against those who were half-castes or had mixed blood in them. It is an interesting point that the real black man hates the half-caste far more than he does the white man.

It took us four days and three nights to reach the end of our river trip, El Cayo, which is seven hundred feet above sea level and one hundred and thirty-five miles from Belize. At El Cayo our friend Schufeldt, who had a big *chicle* concession, had given us the use of part of his "go-down" where his manager was living. In the go-down we had one room and the verandah in which to sling our hammocks. We were shown a mark near the ceiling of the room, which recorded the point to which the recent floods had reached. This must have been at least sixty feet above the usual river level. All the rain-water vats attached to the house had been swept away.

Robson bought three pack mules, then, thinking he

would not be fit enough, after his recent go of fever, to walk, bought a riding mule for himself, a good animal, for which he paid one hundred and sixty dollars. We had much trouble in finding pack-saddles. Nobody wanted to sell except at a prohibitive price, but in the end we hired one, bought another and were loaned a third.

The *arriero* whom Robson had engaged for the trip, " went sick," that is, suddenly decided he did not want to go. Hopun, Schufeldt's manager, got hold of another named Natividad, for whom Robson had to pay forty-five dollars a month. This man had to have something to ride. It did not matter much what, so long as he was mounted. An *arriero* would be *déclassé* in the eyes of his fellows were he to be seen walking. So a most amazing white " screw " was purchased for thirty dollars. One had to examine it closely to discover it was a horse and not a clothes prop.

I had reckoned, having had some experience with mules in Bolivia, that each mule should carry at least two hundred pounds, but was told that in the muddy state of the trails this would be impossible. I realized that even if the beasts could carry that weight we could not get all our gear through in one journey, so it was arranged to take only necessities and to send the mule train straight back for the rest. All these pack mules had been out at pasture for over two months and were soft and out of condition. The day before we were due to start I was climbing the fence of the mule corral when I caught my foot and took a bad tumble, ripping my side quite deeply with the barbed wire and also getting a barb into my foot. Frightened of poisoning, I had an injection against tetanus. Dr. Patterson cheered me by saying that I should probably have tetanus rash in about ten days, but fortunately this did not happen. With all these delays we did not start until eleven o'clock on the morning of March 13th.

The owners of the clearings and villages on the way up the river had given them curiously quaint names: Never Delay, Orange Walk, Old Jim, Teakettle Creek, Two Head Cabbage, Spanish Lookout, Tiger Run, Duck Run, Monkey Run, Banana Bank, Baking Pot, Meditation Rapids, Bamboo Patch, Jones, Baker, etc. The Cays, too, have

picturesque names, such as: Long, and Half Moon Cays (from their shapes), Alligator, Sergeant's, Hen and Chickens (one large and half-a-dozen small ones), Frenchman's Cay, English Cay, Spanish Cay, Dead Man's Cay, Gallows Cay, etc.

El Cayo was a picturesque place with white wooden houses and reminded us of a Wild West town as pictured in the cinema. It was chiefly populated by *chícleros* (gum gatherers) from the bush, a wild-looking lot all out to spend their hard-earned money in as short a time as possible. Nearly every man packed a gun on his hip, and not a few carried *machetes*, like cutlasses, in a sheath. Down in Peru I could never understand why the Indians did not use a sheath. Up here files are used to sharpen the *machetes*; down in Peru they use any hard stone, but both methods achieve a razor-like edge. When quarrels arise they are mostly settled with *machetes*, even if the men have guns. Some of the results were distinctly nasty. A District Commissioner rules El Cayo, and there is a Government doctor. They entertained us royally.

It was a pretty circus that left El Cayo. The *arriero*, on the white clothes horse, Marcial leading one pack mule, Martinez looking after the other two, Jim with his rifle, Ken and I with a shot-gun apiece, and Robson bringing up the rear with his new mule, Marko, wearing a ·38 Colt on his belt. He looked most war-like with the cartridges stuck all round him. Soon after leaving El Cayo the trail became very muddy and the packs started to slip. I had expected this, seeing that all the ropes were new and unstretched. We had about an hour to go to reach Branch Mouth where the river had to be crossed. Just before we reached the crossing I found Martinez' two mules stuck in the mud up to their middles, and the young fool beating them over the head. We off loaded them and carried the loads to the river bank and I cursed Martinez roundly.

There was a big mule train of *chícleros* crossing towards us, so we had to wait for the use of a dory to carry our goods across. Then we went back and swam the mules over. It was half-past two before we were across and the *arriero* told me that the trail to Chorro was very bad. He said that

if our mules were in condition we might make it before dark, but that there was no place to camp before reaching Chorro, so in the end we decided to stay where we were for the night and make an early start in the morning.

This was a beautiful spot and the clear river delightful for bathing. The water teemed with thousands of little minnow-like fish called " billhams," which swarmed around us, nibbling our hands and feet if we kept them still. They were looking for ticks and this is the best way in which to get rid of these pests. Mules are perfectly aware of this fact and I have had great difficulty in getting them out of the water while the operation was being performed. We slung our hammocks under the trees and after a frugal meal of bully, rice and tea, turned in under the necessary mosquito nets and slept well through an exquisite moonlight night.

Next morning we were up at five and got away soon after seven. A mule train going to Yaloche agreed to take one hundred and fifty pounds of our load for two and a half dollars, and this was a great relief to our weak mules. Things went better than we could have hoped. The only incident was a delay caused by one mule bolting into the forest. In the middle of the morning we had a short rest and arrived at Chorro soon after one. Chorro consisted of three deserted huts, in one of which was the grave of the late owner with his belongings piled above it. The forest through which we passed that morning reminded me of that between Napo and Mera, but the trail was not so hilly. Mules are only able to pass during the dry season, never at any other time.

Yaloche, our next point, was supposed to be about twenty-two miles distant. There are no maps available and no two Indians have the same idea of distance. We decided to spend the night at Chorro. Mosquitoes swarmed and the boys who slept in the hut were tormented with ticks. We in our hammocks outside escaped them. The white screw, already looking like death, was badly bitten by vampire bats, and in the morning blood was streaming down his neck. We were up at half-past five and away two hours later. The trail was better though in some parts covered with rough stones, and after two hours we reached the stone

marking the boundary between British Honduras and Guatemala. I need hardly mention that, just as in South America, the boundary is a matter of dispute. At half-past ten we rested by a stream, and a passing Mexican told us Yaloche was only two miles away. This man warned us that there was a countryman of his, with two hundred well-armed desperadoes, raiding the border, and that already an American doctor had been killed.

Martinez, who had stayed behind to mend a broken bridle, failed to appear. We fired shots to guide him, and waited over an hour. At last we decided to push on to Yaloche and then send out a search party. Having been under the impression that the trail was going to be all mud, I was wearing native moccasins made of deer skin with very thin soles. On the rough stones my feet became very sore and painful. Also the wound in my side made by the barbed wire was giving me trouble, so I was not sorry to arrive at Yaloche at noon.

The man in charge at Yaloche had the rather stately title of El Receptor. He was very officious and complained that we had no Consular invoice for our foodstuff, and that our gun permits were not in order. After looking through our things he said he would not charge on what we had with us but that we should have to pay on the second relay of supplies. He gave us permission to camp under an open shed at the edge of the big lagoon. Martinez, who had found another route, arrived shortly after us.

After a meal of rice, bully beef and tea, Robson and I went up to beard El Receptor. We carried a bottle of brandy, and guessing that he would be bribable, asked him point-blank what we should have to pay in Customs duties. He started totting up figures and had got as far as fifty dollars when I butted in with an offer of thirty down. This, after a little haggling, he accepted, so we finished the bottle of brandy and parted the best of friends. So friendly was he that he insisted on our breakfasting with him next morning, which made our start very late.

The trail, at first, was rough but dry, then it became like a ploughed field through which many cattle had been driven in very wet weather. Quite a broad track had been cleared

by the gum gatherers and mahogany cutters, but in places it was quite impassable and we were forced to leave it and scramble through the forest. We were lucky, for we did not often sink above our knees, but the heavily loaded mules were frequently down to their bellies, when they had to be off-loaded and pulled out with lassoes. We were all dead-beat when we arrived at Dos Arroyos at three in the afternoon.

This place was a *chicleros'* camp and consisted simply of an open thatched shelter. There were some *chicleros* there and the first thing we did was to get a big drink out of their bucket of water. We then sent Marcial to get water for tea and cooking. Presently he came back and asked me to come and have a look at the pool. It was a horrible sight, the filthy stagnant water being covered with scum, while on its surface floated hundreds of dead fish, as well as the corpses of small alligators. The stench was dreadful. But this was the only water supply, so we boiled it, skimmed the scum from the surface, drank gallons of tea and hoped for the best.

That was a bad night. The *chicleros* had talked until eleven, and started loading their mules a couple of hours later. Another thing that disturbed us was a racoon after the chickens, and some small alligators which seemed to be in search of the same prey. A nice job, keeping poultry in this country where not only coons, but wild cats, snakes and other vermin prey upon them. At half-past three, when we crawled out from under our blankets, we found ourselves covered with ticks. Ticks are a terrible curse in this part of the world, and some of them seem to be poisonous. We got away at half-past five. Though there was a bright full moon, it was black in the shadows of the forest, and until dawn came we stumbled among deep ruts.

In the middle of the morning we came to another stagnant pool with more dead fish, but were so thirsty we took the risk and drank. We argued that if we were going to get dysentery, we had already got the germs at the last pool. Ken was not at all well and had been sick, though I did not learn this until afterwards. The reason for the dead fish was that some fool had been using dynamite. I think he

would have been lynched if he had been caught, for in these parts water is the prime necessity. My feet were still very sore, so I borrowed a pair of Jim's boots and after soaking my feet I soaped my socks, and after that got on more comfortably. The mules' backs had also started to get sore. Although the loads were very carefully packed, the constant banging against tree trunks shifted them. Near the water hole Robson killed a small but very venomous viper which goes by the queer name of " Tommy Gough."

From this water hole it was about nine miles to San Clemente, our next stopping place. We got there at half-past two, after nine full hours on the trail. All day long perspiration had poured off us in rivers and we had been pestered by a kind of horse fly, called the Doctor Fly, which bit so savagely as to draw blood. We found that these flies were not so numerous if we walked in front of the mules, so Ken, Jim and I would go ahead at a good pace for ten minutes, then throw ourselves flat on our backs for a short breather. We were too tired to bother about snakes. Trudging through this never-varying bush is most monotonous. One's eyes are glued to the trail to avoid stumps, roots, creepers and holes. Owing to the roughness of the ground no two paces are of the same length, and with our guns, *machetes* and ammunition, we were each carrying a load of about forty pounds.

Oddly enough, none of us were quite so tired as on the previous day, and we were lucky in finding cleaner drinking water. After a wash and getting rid of the ticks, we enjoyed a plentiful supper and a good night's rest.

Almost the only inhabitants of this part of the country are the *chicleros* who collect the gum. During the wet season they bleed the trees, collecting the sap in small canvas sacks which are tied to the trunks. This sap is a white sticky substance which is boiled and poured into moulds, making blocks of a rubber-like substance, weighing about a hundred pounds a piece. These blocks have to be transported on mule back to the nearest base for shipment abroad. The gum goes, principally, to the United States.

CHAPTER XXVII

AN UGLY ACCIDENT

NEXT morning all the mules were loaded and ready to start when a horrible accident occurred. Jim, Ken and I were standing close together, with Jim in the centre doing something to his rifle, when there was a deafening report. I head Jim say: "My God!" and saw him holding out his left hand which was spouting blood from severed arteries. The bones were sticking out.

It was a ghastly wound. The expanding bullet had passed through the centre of the palm and blown away most of the bones and ligaments. By good luck a piece of rope was lying at my feet and with this I made a tourniquet which quickly stopped the bleeding. We had brought with us a good supply of medical necessities, including a rubber tourniquet, but these had been left to come on with the second load, so all we had with us was iodine and bandages. I poured on the iodine and bandaged the hand. Never again will I move without a medicine chest.

While I was doing this we had a quick consultation as to the best course to take, and we decided to send off the *arriero* on Marko to Yaloche, from which place he could telephone for Dr. Patterson to come out there at once. Meantime Jim and Marcial should go back to Yaloche. We were lucky enough to be able to borrow a saddle from one of the *chicleros*. There was no alcohol to give Jim; all I could do was send the bottle of pain-killer and spare bandages with Marcial.

It would only have hindered if one of us had gone back, too, for there was no mule that would carry a man, and no saddle. Besides, we did not know the trail like Marcial. I said at the time we were sure to be blamed by people who did not know the circumstances and, indeed, Patterson did

blame us until matters were explained to him. Jim's pluck was magnificent. Although he must have been suffering hell, he joked and laughed, declaring that he had blown away some of the mosquitoes. Of course the morphia pills for emergencies like this were in the second load.

We got Jim off within an hour after the accident, and remained where we were, feeling very troubled and unhappy. That evening I shot a large pigeon which, with bannocks, made a fair meal. These bannocks were made of flour, baking soda, lard and salt. The resulting dough was rolled out flat and fried in lard or baked on a hot stone. That night I lay awake for a long time, wondering how Jim was faring.

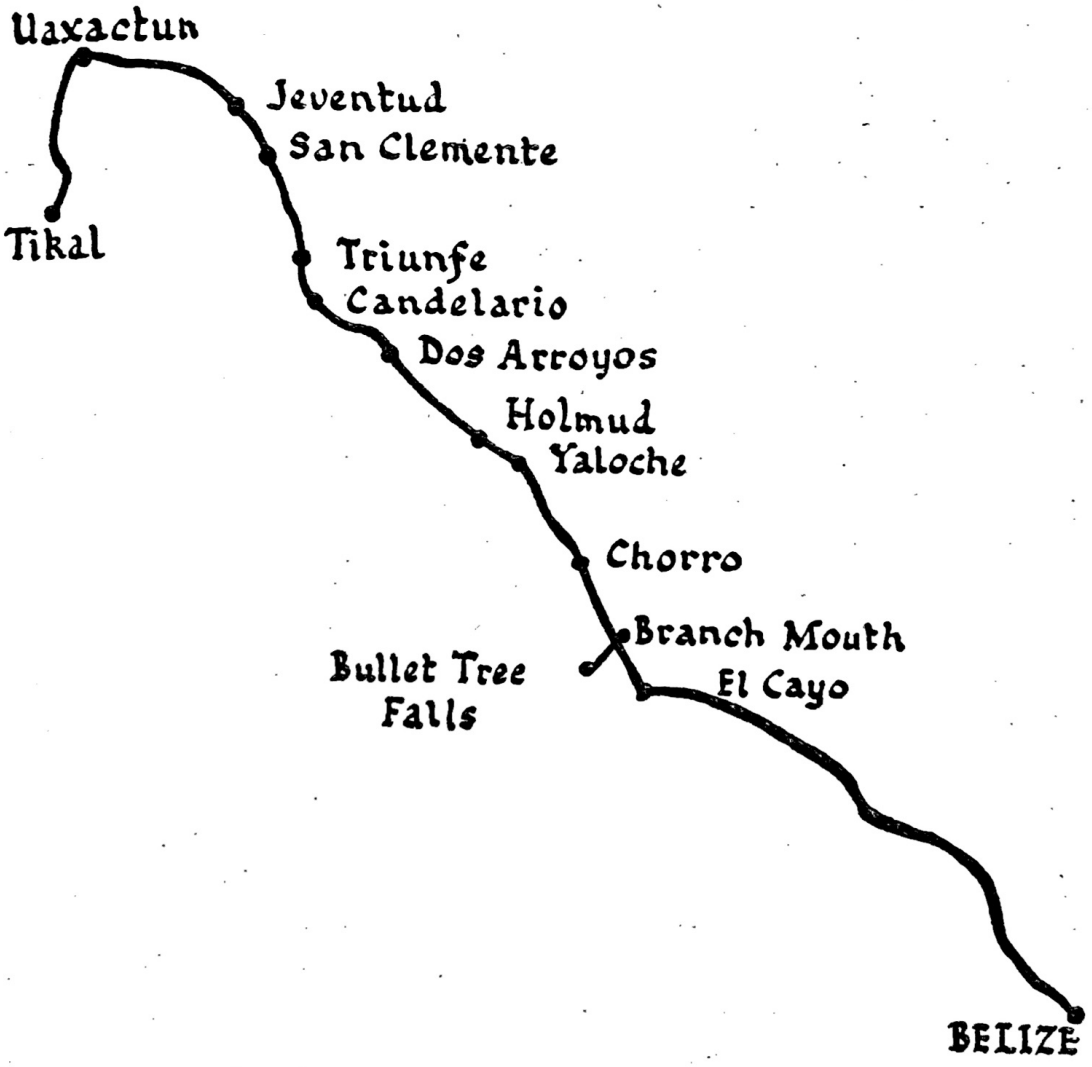
How quickly news travels! On the following day a note came from Ricketson of the Carnegie Institute at Uaxactun, saying that he had heard of the accident from a passing *chiclero,* and was sending two mules to help us get along as far as his camp. We decided, however, to send Martinez on the old white horse and the mules to Uaxactun with our surplus, so as to lighten the loads of the other mules after they had returned from taking Jim to Yaloche. We spent the days sewing, washing and wondering, unhappily, if there was anything else we could have done under the circumstances. We felt that it was rotten for Jim to have gone back without one of us, yet that it was a case where sentiment had to give way to common sense.

On March 20th Martinez returned from Uaxactun, riding a very fine mule, called Old Bill, which Ricketson had lent him in place of the white screw which, apparently, was pretty well finished. He brought another pressing invitation for us to come straight over to the Carnegie camp, but as it was nearly three in the afternoon we thought it too late to start. Later that night we got news that Jim was at Yaloche, and by the mercy of Providence Dr. Patterson was there and apparently Jim going on as well as could be expected. This was a great relief. Later I learned of some of the hells he went through on that ride.

Marcial, used to the bush as he undoubtedly was, lost the trail, and Jim, very weakened by loss of blood, lay on the ground waiting for him to return; then he saw a couple of vultures perched near him, in waiting.

He struggled to his feet and managed to remount his mule just as Marcial, having found the trail, came into sight.

Next morning an empty mule train coming our way, offered to bring our pack mules with them. This left us free to push along at a good pace, and we made the fifteen miles to Uaxactun (pronounced Washactoon) in five hours.



The trail was very rough and for two hours we were crossing logwood *bajos* (swamps), fortunately dried up. The temperature was ninety-four in the shade and the sun blazed down mercilessly. We passed several mounds that indicated ruins which had been grown over; also some *chultunes*, bottle-shaped wells, probably used by the ancient inhabitants for storing grain.

Dr. Oliver Ricketson and his wife, Ledyard-Smith, and

the rest of the people at Uaxactun, made us most welcome. We had a hot shower bath, a quite unexpected luxury, changed into clean clothes, then slept solidly all the afternoon. Afterwards Robson and I had a close crop with the clippers, although our bristly beards made us look like two escaped convicts. Ken refused to make a sight of himself.

Work at Uaxactun started at half-past five in the morning and continued without a break until half-past one. This, of course, is to avoid the intense heat of the afternoon. We were up for a hearty breakfast by lamplight at four-thirty, and later went out to see the excavations. Uaxactun was discovered by Dr. Morley and named by him from the Maya word, *uaxac*, meaning eight, and *tun*, meaning stone, because, recorded on the stelæ, are the only " cycle eight " dates known. With the exception of Tikal Uaxactun is probably the oldest and longest occupied city of the ancient Mayan Empire. Here Dr. Morley found a stela bearing a date corresponding to June 10th, A.D. 68. This is the earliest dated stone known in the Americas. The latest date recorded on the stones at Uaxactun is July 6th, A.D. 639. It is clear, then, that the city was occupied for at least six centuries.

Uaxactun, which stands some six hundred and fifty feet above sea-level, must have been an enormous place. About eighteen separate groups of mounds, temples and pyramids have been found, and there may be many more. Only three groups have been excavated and these only partially. The old limestone quarries, from which the building stone was excavated, are still to be seen and a broad causeway can be traced, connecting the various temples and buildings. What is believed to be the main plaza, the central square of the ancient city, measures ninety-four metres by forty-one. In the centre is a little pyramid twenty-five feet high, which is in a wonderful state of preservation. The reason for this is that another temple had been built over it. The Carnegie Expedition uncovered it.

The Carnegie Institute employs about twenty labourers on the excavation work at Uaxactun, but all the things found go to the Guatemalan Government. The Institute even pays the carriage to Guatemala city. Their interest

is purely scientific. They are concerned in discovering dates and information that will throw light on the ancient Maya civilisation. It seems probable that the city was in existence long before A.D. 68, for it is known that the Maya people were in the habit of using up old stelæ, that is erasing the old glyphs and carving others to commemorate new and important events.

On March 23rd Marcial and Natividad arrived with news that Jim had reached El Cayo safely. At Yaloche that officious fool, El Receptor, had tried to prevent Jim getting through, and Marcial had brought a letter from him requesting a full statement signed by all the witnesses of the accident. That day we spent writing letters and slacking about. We were glad of the rest. We sent a messenger to Vera Cruz, a nearby farm, to try and get the owner, Don Pancho Romero, to act as guide for us to Tikal.

Don Pancho agreed to act as guide, but insisted on the excessive fee of four dollars for his hired horse and fifteen dollars for himself. On the morning of March 26th we got away at eight in the morning and an hour later came to an *aguada* (water hole), but this, in spite of the recent rains, was practically dry. The trail was badly overgrown and we often had to hack a way with *machetes*. At two we came upon a second *aguada*, but that, too, was dry as a bone, so there was nothing for it but to push straight on for Tikal, which we reached at half-past three in the afternoon. The thick forest was diversified by innumerable mounds and traces of ancient ruins.

Don Pancho went off to find water. He said that the nearest was at Hormiguero, an hour and a half's ride to the south. Natividad went west to a place that a *chiclero* had spoken of. Since it was growing dark we decided to camp where we were and were making a thirsty meal of fried plantains and bully beef, when Natividad came back and reported that he had found plenty of good water less than an hour away. He brought back two kettles full which gave us a cupful each.

For some reason, perhaps because of the idle days at Uaxactun, Robson and I were very done. My feet felt as if they had been bastinadoed and my legs as though they had

been stretched on the rack. I was so tired I did not bother to make the usual shelter of palm leaves, but just threw a tarpaulin over the mosquito net. Of course it began to rain and the tarpaulin had holes. Presently I realized that a pool was collecting above me which would soon stream down in an uncomfortable fashion. I had a bright idea. My shot-gun lay under the hammock, so I reached down and took off the stock and put the barrels up as a post, one end between my legs, the other holding up the top of the mosquito net and turning the tarpaulin into a kind of tent. I had to take the chance of moving and knocking down the improvised tent pole, but I was so tired that morning found me in exactly the same position.

The great difficulty in this country is the water supply and until Natividad brought news of the water hole we had feared that we, like all others who had explored at Tikal, would have had to turn back. Dr. Morley had managed to stay at Tikal for a month but he had relays of mules bringing water daily from Uaxactun. The first thing we did on the morning of March 27th was to move to Natividad's *aguada*. To our joy we found an old *chiclero* camp where a good bush hut was still standing in a clearing. There were a lot of old packing-cases which had been left behind so, after a meal of sardines, rice and tea, we got busy making a table and fixing things up. The *aguada* looked as though it would last some time. The trouble was that it was a long way from our objective which lay east of Tikal, while the water hole was an hour to the West.

The question of where the Mayas got their water has been a constant puzzle to archæologists. Descendants of these old people sink wells even when there is an outside supply of water, and some of these wells are as much as seventy-five feet in depth. It is possible that their ancestors did the same. The Mayas were an agricultural people and must have needed more water than wells could supply, especially during the dry seasons. It seems to me a plausible theory that the *bajos* (swamps) in those days were big lakes or lagoons, such as exist to-day at Yaloche and Flores. The latter is a picturesque island town built in the middle of a considerable lake. It is known that the Mayas emigrated

en masse from their big cities, and there is no evidence that they were driven out. It seems possible that for some reason, possibly earthquakes, the lagoons dried up, leaving the country uninhabitable as it is at present.

At Uaxactun Ricketson had begun to dig a well and sank it as deep as thirty-six feet. There was evidence of water but dynamite was necessary to carry on the work. The Guatemalan Government, however, flatly refused to allow any explosive to be imported. They seem to put every obstacle in the way of reputable people who spend a lot money in opening up their country.

The *arriero* and all the mules were sent back to El Cayo to fetch the second load of supplies. The supplies we had brought with us were already running short owing to the delay caused by Jim's accident, so unless we were lucky enough to shoot something for the pot, we were likely to go hungry. It was a fifteen days' journey to El Cayo and back to the camp.

We slung our hammocks between trees and built canopies of palm leaves over them. Everyone had his own way of doing it and there was some original architecture. By evening we were quite comfortable, busy writing up our diaries. The last tin of bully, some rice and tea furnished dinner. Again we were troubled with ticks, little dark brown fellows, but these were not so bad as the silver-headed species, the bites of which left a nasty swelling.

Early next morning we set off to try and cut a trail to Tikal. We worked by compass and after an hour came suddenly upon a single-chambered ruin about sixty feet by thirty feet, in the centre of which was a circular stone altar four feet across. An animal was carved on the top, and there were glyphs on the sides. On digging down we found that this altar was resting on a stone of similar size, also carved on the edges. Near the altar was a fallen stela and when the debris was removed this was seen to be carved though badly weathered. It was quite clear that this was a new discovery, so we determined to come back later with tools and do some excavation work. Then we continued our trail cutting until we came out on the main trail about half a mile East of Tikal. We got back to camp

at one and lunched on tea and bannocks. Since we had no butter we used mustard to flavour our bread.

The howling monkeys made terrifying noises. Starting with a low snarling, the sound rose steadily to a blood-curdling howl; then dead silence for a few seconds, after which the performance was repeated all over again.

Tikal is looked on with awe by the *chicleros*, who claim that it is haunted. About the year 1840 some Indians took refuge there owing to a rising, and lived there for some time. They, too, had superstitious fears and destroyed the heads on the stelæ, claiming that the old gods could have no power without heads. They also believe that the howling monkeys are incarnations of the spirits of their ancestors. Marcial told me that, when he was working as a *chiclero*, and was sleeping at our first night's camp, a voice called to him in Spanish: "Come here, come here." He said he was too frightened to move, but that every time he tried to sleep, something came and shook his hammock and prevented him from doing so. We heard a "night walker" monkey in the distance on several nights. If one can shine an electric torch in its face it becomes dazzled and will not move. The skins are worth having.

CHAPTER XXVIII

THE BANDITS OF TIKAL

THE treasure temple of which we were in search was supposed to stand somewhere east of Tikal, within a day's march. But a day's march might mean twenty to twenty-five miles. It was worse than looking for a needle in a bundle of hay. We had heard of a *chicleros'* camp, now deserted, called "Reforma," where we thought there might be water, so we determined to try and find it, as it might possibly make headquarters. At seven o'clock on the following morning we started for Tikal and from there began to cut our way due east.

The bush was thick as a hedge and two hours' hard work cutting and slashing advanced us barely a mile. We came across several mounds, but the ruins were completely covered with vegetation, so it was impossible to examine them. Although the thick foliage protected us from the direct rays of the sun, it was swelteringly hot and we were glad to get back to camp. In the afternoon two toucans were shot. It seems a shame to eat such exquisitely plumaged birds. Ticks were worse than ever and the unfortunate white screw was again attacked by vampire bats. There is no pasture in this part of the country, so the mules were fed on the leaves of the *ramon*, or bread-nut tree.

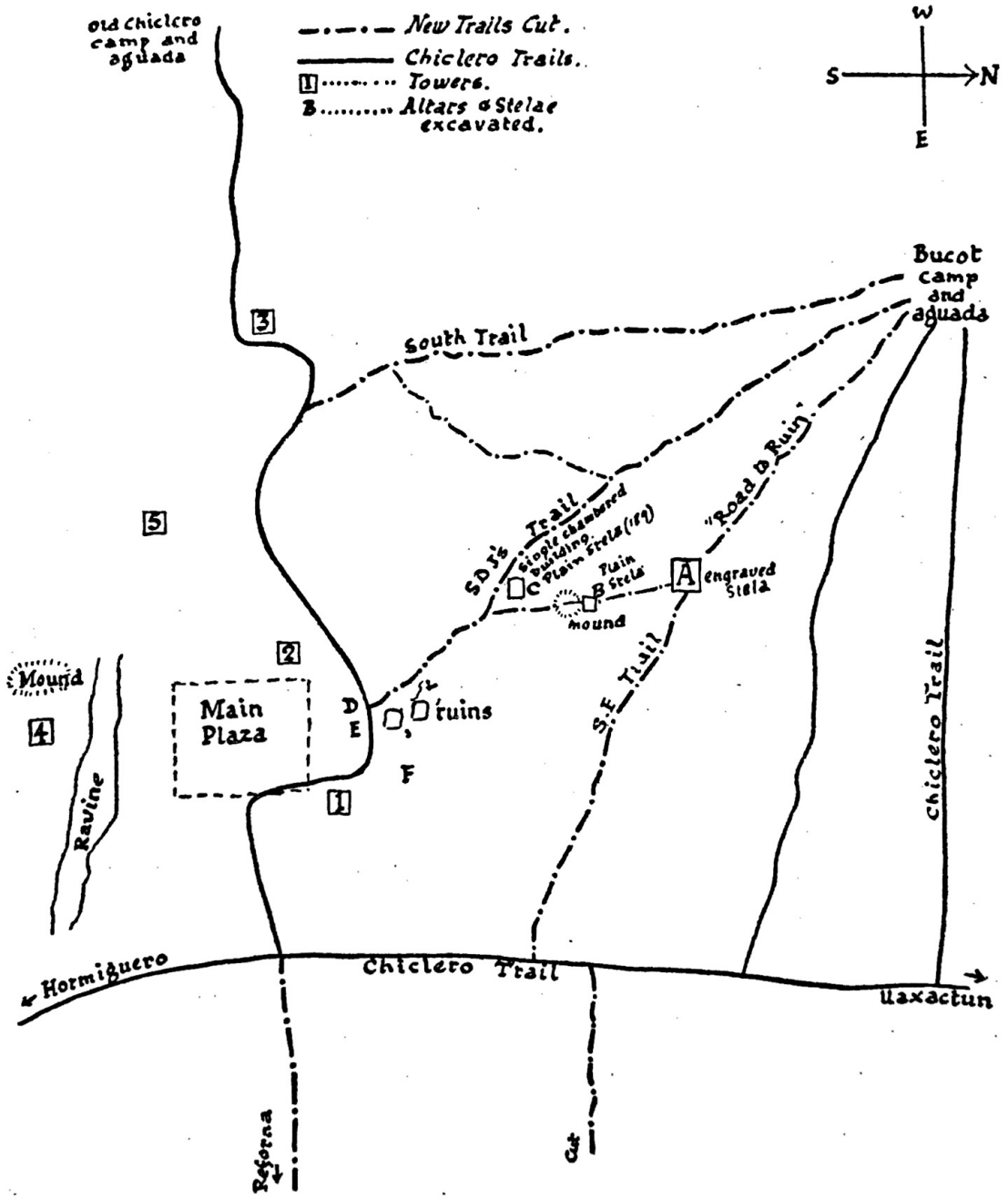
March 30th was Sunday and a day off. I went alone to try to find a short cut to Tikal and, working nearly due south, came to a big group of ruins which, I imagine, must have formed part of the ancient city. I counted ten conical mounds from fifty to a hundred feet high, but from the top of the highest, could see nothing of the five famous towers of Tikal, which are one hundred and seventy-five to two hundred feet. Trees have done more to destroy

the ruins than the passage of centuries. The seeds germinate between the interstices of the stones and the swelling roots gradually force them apart. Tired and hot from trail-cutting and climbing the mounds, I headed back to camp. Though I had blazed the trail so carefully, I twice got lost. The rest of the day was spent doing odd jobs. For dinner we had toucan and a tin of tomatoes.

That night rain fell again heavily. Robson and Ken got soaked, but owing to the previous day's work on my palm-leaf shelter, I escaped a wetting. Incidentally, I ought to be worshipped as "The God of Rain," for wherever I have been it has always been the wettest season known. It was the same in Peru, Bolivia, Ecuador and now in Guatemala. The whole of the next day we were busy trail cutting, and almost the whole time were working over mounds concealing ruins. On the way back to camp some spider monkeys appeared in the trees above and pelted us with missiles, and in the end put three intrepid explorers to ignominious flight with copious showers of contemptuous water.

That night the thermometer dropped to sixty degrees. That does not sound very cold, but we were simply perished. It had been ninety-five degrees a few hours previously. At two in the morning I woke up to see Robson writing by candle-light. I was puzzled to know what he was at, but left it till morning to enquire. Then he showed me pages and pages of undecipherable Spanish, and many drawings. He said that, before leaving England, he was told, through automatic writing, to dig up a certain stone, on the reverse side of which he would find a coat-of-arms and a date, exactly as he had drawn it. I was interested and suggested that it would be most helpful if he could in this way get any indications that would help in the search for the treasure temple. So we left him in camp and took Marcial to help in the trail cutting.

On the way we saw a big bird, a *curassow*. Marcial went after it, but failed to secure it. He told us that he had spotted a deer and chased that, too, but unsuccessfully. We saw the tracks of *tigrillos* (small leopard cats), also burrows of that curious armoured beast, the armadillo.



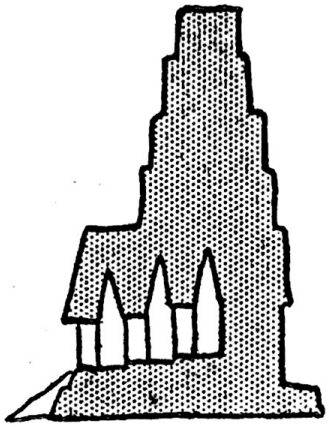
Rough Plan of the Environs of Tikal

Once we got a glimpse of a wild pig. The bush was denser than ever and after an hour and a half of cutting we had progressed no more than half a mile.

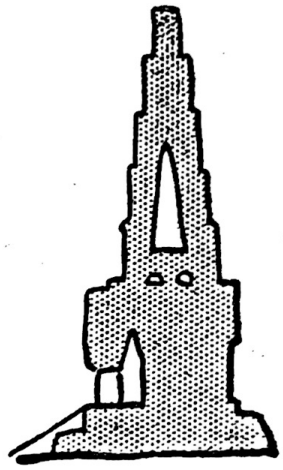
On getting back to camp we were most grateful to find that Robson had shot a turkey. The food question was becoming very acute. We decided to take it in turns to stay in camp and let Marcial help in the work. As an ex-*chiclero*, he was used to the bush. Our manner for cutting the trail was for one to go ahead with the compass and *machete*, and the other two to widen the path as they followed.

Our bodies would have been an interesting study to any entomologist wishing to observe the effect of insect bites. Not even the South American forests can match Guatemala for insect pests. There were hornets, ants, ticks, fleas, sand flies, doctor flies, and a dozen others whose names we did not know. The most painful bite is that of the ant. It resembles a prick with a red-hot needle, but fortunately, has no serious after-effects. There are also snakes. Robson killed a *fer de lance*, one of the most deadly reptiles in existence. We kept a sharp look-out for snakes and always carried a small lancet and some permanganate of potash in a wooden tube. Butterflies were less common than we had expected, and I saw no rare species. I was disappointed not to see more monkeys.

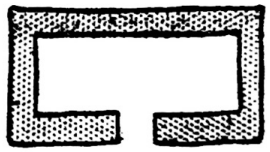
By this time we were almost entirely dependent on our guns for food. Our mules had not arrived, and we were so short of necessaries, that on April 4th we sent Marcial back to Uaxactun to get some absolutely necessary supplies, also to borrow a pick and shovel until ours arrived. He started at seven. Four hours later he returned in a very excited condition and with his shirt almost torn off him. So excited was he that at first I could not find out what had happened. He seized a gun and was starting off again down the trail when Ken and I grabbed him and made him explain what had occurred. It appeared that two bandits had held him up. At the first sign of trouble he had had the sense to slip our letters into his shirt. The bandits searched him but did not find the letters. They took his only two cigarettes, crumpled them up and stamped on them; they



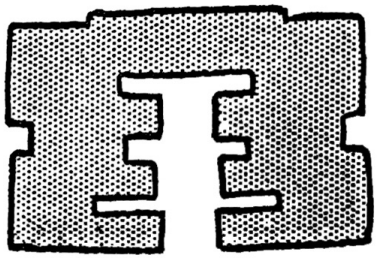
Maya Temple at Tikal.



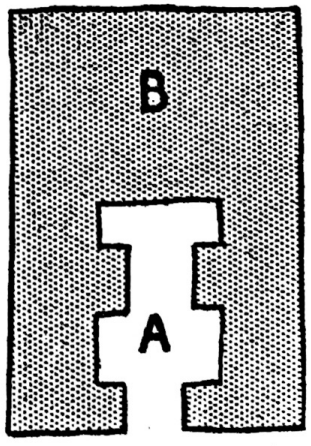
Temple at Tikal with single chamber and hollow roof-crest.



Single chamber building.



Ground plan of above.



Ground plan of another Temple.

A. Small room in Tower.
B. Solid masonry with roof-crest built over.

also took his matches. They broke his *machete*, stamped his water-bottle out of shape and took the halter off his horse. It seemed a most senseless outrage, but there was nothing to be done about it, for by this time the men were probably miles away.

On the following day Ken volunteered to accompany Marcial to Uaxactun while I went off to Tikal to see if I could find my way to the ruins from the spot which I had reached the previous Sunday. I did reach the deserted city, but the bush was so dense that I was absolutely under one of the big towers before I saw it. Robson stayed on guard at the camp. With these bandits about, we did not think it wise to leave it unguarded.

The water in our *aguada* was shrinking rapidly, and the food supply was doing the same. That day we breakfasted on bannock and potted meat, lunched on bannock and mustard, dined on a toucan we had shot and a few beans. On April 6th, Ken came back from Uaxactun with six tins of bully beef, a big packet of rice, a pick and shovel. The Ricketsons had also made us a present of a plum pudding, some pots of jam and marmalade, and a tin of biscuits. They were amazingly kind. There was no mail for any of us, but we were delighted to have a cheery note from Jim. That night we had a sumptuous dinner of beef, beans and plantains.

Robson was still getting quantities of automatic writing, and his "guide" suggested digging in Tikal. Ken and I had little faith in this guide, yet decided to give him a square deal, so we took our pick and shovel and began to dig in the spot indicated. We got down four feet in the limestone. All we found was two floors with rubble between them. This limestone has a lot of hard flint in it, so it seems likely that at one time all this part of the country was on the bottom of the sea. When we got down to bed-rock we called it a day.

On April 8th we again visited Tikal and Ken and I climbed one of the five towers, which was about two hundred feet in height. From the top of this, two other towers could be seen, thrusting their heads above the tree-tops. All around us was a sea of green, stretching as far as eye

could reach. By the contour of the tree-tops, one could surmise that there were many other mounds. These towers are built in pyramid form and on one of the four sides there is always a broad flight of steps leading to a temple on the summit. They have enormously thick walls and narrow little rooms, for the Mayas did not understand the principle of the arch. They sloped the walls up to the roof on the "batter" system, continuing the outer walls perpendicularly to hold the "batter" stones in place. These towers have only one entrance, which admits to a very small interior. It may be that there is a staircase inside leading up from the base of the pyramid.

In Mexico, as well as in Egypt, the pyramid was the building, but here the pyramid seems only to be the base or platform for the building. The walls of the lower room in this tower were lined with stucco and had originally been coloured red. The colouring matter was obtained from a local tree. Besides the towers, there were countless other buildings, all with small rooms and enormously thick walls. These were probably the residences of the priests, nobles and court officials. The majority of the population must have lived in wooden thatched houses, which have long since disappeared. Circular altars and stelæ were plentiful. Some of the stelæ were still standing, but few of them were carved. There were many *chultunes*, which I think probably were grain stores, for I have seen precisely similar bottle-shaped structures used by the kaffirs in South Africa for that purpose.

A few altars have been dug under and a few trees cut down to enable a photograph of one of the towers to be taken. This was done by Maudsley or by Morley. Otherwise, there is no trace of excavation work. Acres and acres of the city remain untouched and unexplored. The area of the city is roughly four miles by two.

The name Tikal means "The Place of Voices." It stands nine hundred and ten feet above sea level. Exploration here is a most difficult matter. First there is the lack of water, then the amazing thickness of the undergrowth, and the heat of the climate in the dry season. Added to these difficulties are the retrograde attitude of the

Guatemalan Government, and the immense amount of money and labour required to uncover even a small part of this vast city. The Carnegie Institute have done good work at Chitchen Itza, in Yucatan, having excavated and restored nearly all of it, but this town is much more accessible than Tikal.

The water in our *aguada* was now going down at an alarming rate and we were doubtful if it would hold out till the end of the month. In spite of the intense heat of the days, the nights were quite cool, and I found a sweater a great comfort to sleep in. I noticed new forms of bites on my hands, nasty swellings with watery matter exuding. Marcial said they were beef worms, also known as screw worms, and that wet tobacco should be applied to narcotise them. It was dangerous to try to get them out alive. Since our cigarettes were finished, I collected some old cigar butts, soaked them and strapped them over the bites with adhesive tape.

We finished our last cupful of flour on the morning of April 10th, then—joy of joys!—at half-past three that afternoon the mule train arrived. With the stores was a demi-john containing a gallon of rum. This was more precious than gold, and was rationed out at one eggcupful a day, hardly excessive, yet most pleasant. We heard that Martinez had chosen to stay in El Cayo. We were not sorry. That afternoon there was a heavy shower, and it drizzled most of the night.

On the following day we again visited Tikal and Robson took us to another spot indicated by his "guide." We dug hard, but without result, so we came to an arrangement whereby each of us could choose a spot to dig two days in the week and the other two should help him. Robson was rather disgusted, for he still had implicit faith in his "guide," and at four o'clock he left camp with his gun to shoot something for the pot.

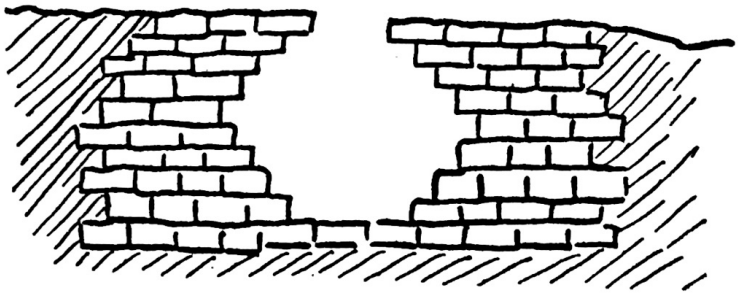
At six, Marcial served supper, but there was no sign of Robson. Ken and I began to get worried, for darkness swoops down with incredible swiftness, and we knew that if Robson were still in the bush and not on a trail, he would probably be lost. As we sat down to feed, we heard a shot.



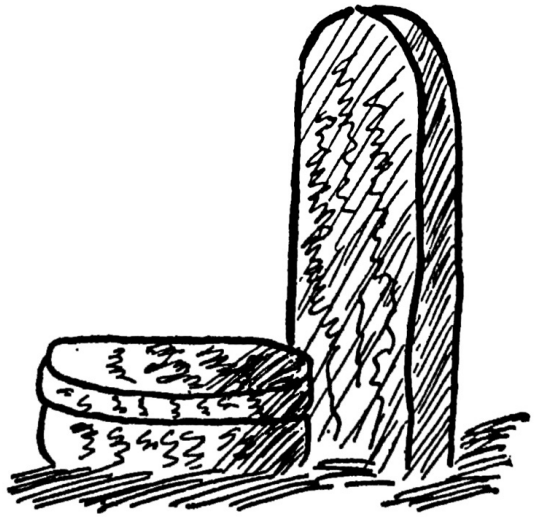
Probably the Maya War God.



Itzamma, the all-powerful Sky God.



Showing method of constructing a "chultune."



Stela and altar. Stela usually north of altar. This altar uncommon because in two parts.

I fired at once in reply and we went off in the direction of the report. A little later there was another shot which seemed further off and I fired again and kept on firing at intervals. Since there was no answering shot I thought Robson must have run out of cartridges. Ken and I went along the main trail towards Tikal, alternately shooting and shouting, then, as darkness fell, returned to camp, snatched a mouthful of food and set off again, taking Marcial with us and torches. We were surprised to encounter no animals, as hunting with torches is a favourite method. For hours we searched and shouted and at eleven returned to camp, having lost ourselves several times on the way back.

It was hopeless to attempt anything further during the hours of darkness, and it was necessary to conserve our energy for the morrow. I was not really worried about Robson, for I knew he had a compass with him, although no *machete*, but, as I said to Ken, the absence of a *machete* was all to the good, for certainly Robson would not get far without one. Both Ken and I fully expected to see Robson roll into camp soon after daylight, and we both felt very unhappy when six came and there was no sign of him.

At half-past six, Ken took the trail for Tikal, but first we sent Marcial to Uaxactun with a note to Ricketson, asking for helpers. We could find no sign of our missing friend, and at two, returned to camp for a hasty snack. Then Ken and I started off again. We decided to keep together, otherwise we might complicate matters by getting lost too. In point of fact, we did get lost but, having taken careful directions, with the help of the compass, we managed to strike the trail again. This was a lesson to us how easy it was to get bushed.

We went again in the direction of the sound of the first shot we had heard, and started to cut our way through the bush, for we could only surmise that Robson had crossed the trail in the dark, a very easy thing to do, since in places there was only one step to take to cross it. We cut for an hour, then Ken went towards Tikal and I the other way. We had found out that noises and even shots do not carry far in the density of the forest.

"If only we could find him waiting in the camp," I said to Ken as he and I went our different ways, and Ken replied earnestly:

"I would give my soul if we could." Two minutes later I gave a last despairing shout, a very hoarse one. To my amazement this was answered, and no more than a hundred yards ahead I found Robson, sitting by the trail, ghastly white, his face lined and looking ten years older. I fired two shots, a pre-arranged signal that all was well, and Ken came tearing back.

Robson was very weak and almost delirious. Luckily, we were only thirty minutes from camp, and with his arms over our shoulders, we got him in. He babbled incoherently most of the way. It was five in the evening when we found him, so he had been out in the bush for twenty-five hours. The poor chap was one prickly mass of thorns, but after a little food and a double ration of rum, he went off suddenly to sleep. So did Ken and I, who had done fourteen hours' walking and trail cutting during the past twenty-two hours. A man used to the bush would know where to find water in creepers, and a few berries and wild fruits that would sustain life. I met a man who had been lost for eight days, yet had survived. The lesson is, when one is lost, to sit tight and not attempt to move until daylight comes, when it may be possible to get bearings by the sun.

Early next morning, nine men with Marcial arrived from Uaxactun. Ricketson had despatched them the night before, and had offered a reward of one hundred dollars for the man who found Robson and enclosed authority for me to draw on the Carnegie Emergency Fund to any amount. The men were naturally rather disappointed to see Robson safe in camp.

We found that Don Pancho had come over during our absence and had brought from Ricketson meat lozenges, Bovril and Horlick's milk in case Robson was found in a very weak state. Nobody could have been kinder or more thoughtful, and we owed, and still owe the Ricketsons an immense debt of gratitude.

CHAPTER XXIX

THE END OF THE TRAIL

ROBSON had fallen and damaged his knee, so had to be left in camp, but Ken and I continued our explorations in Tikal. We found a shorter way, which saved us quite twenty minutes, and christened it "The Road to Ruin." We tackled the altar and stela which we had found on our first day. We got rollers and slid the upper part of the altar to one side. It must have weighed a ton, and we had to cut quite big trees in order to get levers strong enough to move this mass of stone. Then we dug, but at a depth of eighteen inches struck bedrock, so returned to camp.

Next day we tackled the stela, digging beneath it. Here our labours were rewarded, for I found a piece of obsidian. When I passed it up to Ken he discovered that it was etched. We continued digging and found nine engraved obsidians and nine eccentric flints. There is probably some significance in this number nine. Obsidians are pieces of volcanic flint common in most parts of the world and used by savage tribes as arrow heads. They had been found by the bucketful at Uaxactun, but Ricketson had never seen one engraved. The eccentric flints were in the form of rings, crescents, alligators, etc., and probably had some religious meaning.

On April 17th, Ken and I devoted the day to fresh explorations. We climbed Number Three tower, which is the highest and largest. Part of the roof had formerly been supported by ten-inch beams of logwood which were finely carved. These carved lintels had been removed, but there is a photo of them, taken, I think, by Dr. Morley; a few beams remain in an almost perfect state of preservation, possibly eighteen hundred years old. The heat was more

intense than ever that afternoon. It was ninety-eight in the shade.

The next day's digging brought nothing but scraps of common pottery. That day was hotter than ever, and at four o'clock a terrific thunderstorm broke. I have seldom seen such rain, even in the tropics, while the thunder crashed like great guns and vivid lightning blazed. The wind, too, was tremendous. Our papers and things were blown all over the place, while great trees falling, made alarming crashes in the forest. This was Good Friday, and afterwards we heard that the storm was general over a great area of the country. At Uaxactun it blew down a house and did much damage. In our case the damage was compensated by the fact that the water-hole was full again.

For the next twenty-four hours it was far too wet to work, and on the 20th we started afresh and dug under a plain stela. It was hard work, for the ground was full of tree roots. We found any amount of broken pottery but nothing else. It would appear that nothing of value was buried under the plain stelæ or the altars. The pottery was inferior to that which I had found in Bolivia.

Our next field of operation was Number Five tower which stands on the far side of a deep ravine. The huge artificial mound on which this tower stands is fully two hundred feet high, while the tower on the top is surrounded by a circular moat or roadway. The tower itself, with the mound and roof comb, must be two hundred and fifty feet high, and the building itself appears to be an almost solid mass of stone. There is only one small room about ten feet by five.

In this tower I found a *graffiti*, but could not be sure whether it was ancient Maya or merely a scribbling by some *chiclero*.

Robson suggested that he should go to Uaxactun for the mail. I guessed what was in his mind, which was that, with his crocked knee, he felt useless. There was no doubt that he had a horror of the bush after getting lost and that he wanted to get away, so I advised him to go and remain at Uaxactun while Ken and I carried on for a time. A

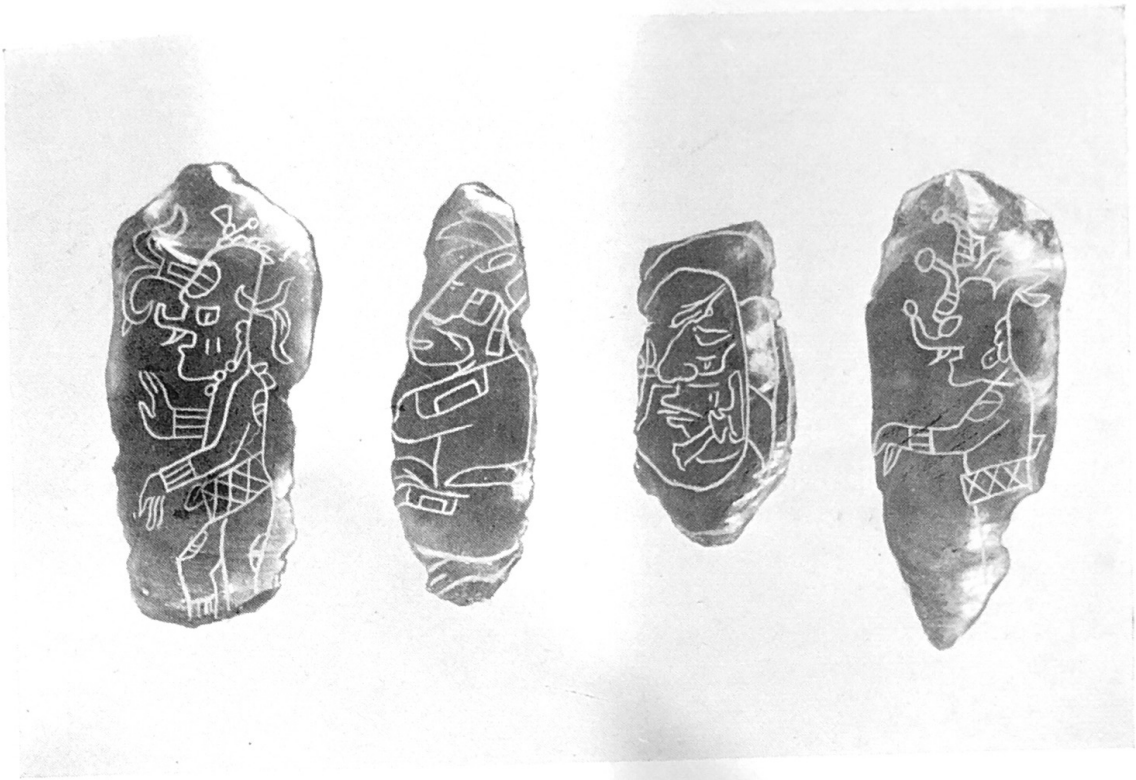
horror of the bush, with its silent clutching arms, is easy to understand when one has been in it.

Ken, too, was getting tired of it, and neither he nor I could see more than a week's work in front of us—that is work which two people could tackle. Real excavation in a place like Tikal would mean an army. So it was arranged that Robson should leave in the morning and that we should stay on for about another week, then pull out. This helped a lot with the food question, for now we should have enough to last the two of us comfortably.

Next day, after Robson had left, Ken and I went to Tikal to take photographs from Number Three tower. On getting down I found I had lost my wrist-watch, so had to go back to look for it. Although the chances were a thousand to one against finding it, I was lucky enough to sight it three-quarters of the way up. There was little life among the ruins. Even birds were scarce, but as we left Ken saw a fox and had a snapshot at it with his Browning. The powdered lime floors of the towers were full of small cone-shaped holes. These are ant-traps made by that clever insect known as the ant lion. When the ant falls in, the loose dust gives way as he struggles to climb out and so he remains a prisoner until the ant lion comes to collect his dinner.

Luck was with us when we started digging on April 20th. We had begun work under a stela with a damaged head, and after a couple of hours' hard digging unearthed nine engraved obsidians and eight eccentric flints. The latter were much finer than those which we had previously discovered. We could not find the ninth flint which, we assumed, should have been there, but we got two broken pots, each about six inches in diameter. In the afternoon we dug under another stela, a plain one, but only four inches separated it from the solid limestone.

Natividad, who had gone to Uaxactun with Robson, returned with letters. After a bathe I went off to try and shoot a monkey. I could hear hear them howling in the distance. The din was most terrifying. I can only compare it to a herd of hungry sea lions, and as I approached I had quite a difficulty in persuading myself that they were really



Engraved obsidians found at Tikal, Guatemala



Eccentric flints found under a stela in Tikal

harmless. Half an hour's stalk brought me within sixty yards of the tree where they were holding their parliament, but the foliage was so thick it was most difficult to catch even a glimpse of them. At last I shot at one through the leaves. Nothing happened and thinking I had missed, I peered up, trying to get another shot. All of a sudden a fine black furred fellow fell in front of me. He was quite dead and stood about three feet high, was fairly fat and weighed about fifty pounds.

Then I had an experience of how easy it is to get bushed. I had come only sixty paces from the trail but, in the excitement of stalking, had lost all sense of direction. Also I realized that I was without my compass. I sat down and thought hard. The main thing was not to lose the monkey tree which I knew was near the trail, so all I had to do was to blaze in all directions till I found it. But if I lost the moneky tree I was lost. At the second attempt I struck the trail and was out of trouble. That monkey weighed more than a hundred pounds before I got it back to camp, swinging over my shoulder on a stick.

After dinner a dry thunderstorm broke and lasted for two hours. The lightning was so vivid and continuous that one could have read by it quite easily. Nasty things dry thunderstorms, for they are far more dangerous than the rainy variety. It was impossible to sleep until the storm had passed, then painfully swollen bites kept me awake until two in the morning. It seems that fair-skinned people suffer more from bites than those who are darker. Chadwick and Jim were both very blonde, and they suffered worse than any of my companions.

Two more days were spent in digging and exploring at Tikal and we found twenty-five obsidians of all shapes, and eighteen of the eccentric flints. But now it was time to return. Ken was getting nervy and had a curious fear that something would happen so that he would never get away. After all, we had done fairly well. We had a better knowledge of Tikal than any other archæologist, had discovered many fresh ruins, and had found engraved obsidians of which no one else had even heard. We had also seen a part of the world that very few have traversed. Among our

finds were scallop shells. We wondered if they were relics of the time when the ocean had covered the spot or if they had been brought in from the coast.

I had also found them in Sacambaya. It was not until later I learned from Captain Joyce of the British Museum, that these shells were often used as jewel cases. He showed me specimens containing jadite.

The night of April 25th was Robson's birthday, so we ate a plum pudding, which his mother had sent him, and a turkey shot by Natividad. We also treated ourselves to a double shot of rum to drink his health. Meantime, the skull of the monkey, stuck up on a post, grinned at us with a curiously human expression. We had decided definitely to leave on the morning of Tuesday the 29th.

On the previous night, Marcial and Natividad reported that they had heard a mysterious whistle from the direction of the mule corral. They both went down to see who was there, but found nothing. I suggested that the sound was made by a bird, but they both swore that in all their years in the bush they had never before heard the same sound. They were convinced that there was *obeah* on the place.

The whole of Monday, the 28th, we were busy packing our gear. We saw many butterflies, including a number of big blue and very beautiful morphos. Unfortunately, the net was already packed. Marcial reported seeing a tapir, but I thought it was more probably a pig. He brought in some very sweet and delicious wild cherries. On Tuesday morning we were away at seven. Many trees, blown down by the gale, blocked the way, and as we started trudging along the rough trail, the bright and pleasant thought occurred to me that there were seventy-five miles of it to be covered before reaching semi-civilization at El Cayo. We reached Uaxactun at half-past one. Ledyard-Smith was there alone with Robson, as Ricketson had left on the previous Saturday.

Ledyard was busy making a squeeze mould of the stela dated A.D. 68. Dr. Morley, who discovered it, wanted a replica for his tombstone.

For this and other stelæ, papier mâché moulds had been tried, but they were awkward for transportation on mule-

back, then the foreman had the bright idea of making a mould from rubber, bled direct from the tree—the first effort was a success marred only because, in their anxiety to get as much rubber as possible from the tree, they allowed it to bleed too long, and when this is done, a kind of green moisture gets into the rubber and must be filtered out through special bags; they neglected to do this, with the result that the mould blistered in parts.

Rubber moulds have the great advantage of being light and easy of transport, and the shrinkage in work of this size is negligible.

Great progress had been made since our last visit in excavating temples. The most baffling feature of Mayan architecture is the number of floors of limestone, one above the other. In one spot I counted no fewer than eight of these, with spaces of about four inches between them, and there were more at wider intervals below. Some of these could be traced to their normal end, other vanished into space for no apparent reason. Perhaps when a floor got worn by the passage of countless feet, it was repaired by building another over it. With the Mayas it seems to have been a general practice to build over existing edifices rather than raze them first. After dinner that night we made the last of the rum into "rum sours," and Ledyard and I sat up yarning, until half-past one—not a good idea when one has to rise at four-thirty.

On May 1st we left at half-past seven, arriving at San Clemente soon after twelve. The mud had dried and the trail was better than when we had come up. For some reason Ken and I were much more tired than we expected to be. After a month's constant working and walking, we ought hardly to have noticed so short a march. I am inclined to think that we were run down by the damp heat, the constant poisoning by insects and thorns and, more particularly, the lack of fresh vegetables. I noticed, too, that bites which, a month ago, had little or no effect, now swelled up badly. I had a nasty swelling on the arm, which got more and more painful as the days went by, more expecially in the morning and the evening. It was a beef worm turning round to make itself more comfortable.

I may mention here, that by the time I reached Belize, the pest was making itself really obnoxious, so I went to Dr. Smith, who squeezed its tail out, then pulled out the rest with a pair of forceps. The worm was nearly an inch and a half long and quite fat and hairy. These hairs act as spikes, which make it most difficult to pull the creature out.

No fewer than four *muladas* were in San Clemente, so we were lucky to get a room to ourselves in a deserted hut. By room, I mean a rectangle of poles with a roof over some part of it, leaving plenty of space for the study of astronomy. We were faced with our longest march on the morrow, so turned in early, but got little sleep on account of the noise made by the *arrieros*. All the same, we were up at four-thirty, and in two and a half hours had reached Triunfo. This was the spot where we had found the dead fish, but now the *aguada* was much better and cleaner. At one o'clock, Robson, who had been walking, decided to ride. Ken and I walked on and later, Robson caught us up. He was leading the mule and limping, and told us that the mule had thrown him and dragged him for some yards. Luckily, not much harm was done. This day's journey was completed in seven and a quarter hours. We had all had enough by the time we got in.

The trail beyond Dos Arroyos was more open and the day passed without incident, except that I nearly trod on a five-foot snake which was decently trying to get out of my way. On the trail one gets many snake alarms by treading on the end of a branch lying across the trail—the far end, perhaps ten or fifteen feet away, disturbs some leaves, and one jumps, thinking it might be a snake. This and the lizards scuttling away, gave us many a scare. It was that day, too, that Robson had rather a narrow escape from a coral snake, a particularly deadly reptile. He almost sat on it as he dropped to rest beside the trail. It must have just fed, for it did not strike and he killed it. It was three and a half feet long.

Just outside Yaloche we buried our treasures of flints and obsidians. We were not going to risk them under the eyes of that officious person, El Receptor. To our delight,

he had been sacked a couple of days earlier, on Ricketson's complaint that he had been holding up their supplies. The new man, under the impression that we belonged to the Carnegie expedition, could not do enough for us. It was quite needless to put us to any trouble about having the baggage examined, his house was ours. He insisted on giving us drinks and did not even stamp our passports. In return for his good offices, we gave him the surplus flour, rice and the like, and so lightened the load by another box.

Our tempers were all frayed. The fact is that, after being bottled up together for two months, we were all getting on one another's nerves. Yet there had been no quarrels, which is a good record, and we still remained the best of pals. That day I found particularly trying. Yet, once in camp, with a dish of tea and the prospect of El Cayo on the morrow, we all brightened up and became normal again. The joy of seeing the big sheet of water, and a good bathe, acted as a tonic.

Chorro was reached by nine o'clock on the morning of May 4th. We did the journey, which had taken four and a half hours coming out, in three. Here we found clear running water and fairly guzzled it. Beyond Chorro the trail was bad until we came to a tractor track for hauling mahogany, which had a much better surface. The trouble was that its width allowed the sun's rays to beat down unmercifully, and we were all pretty done when we reached Bullet Tree Falls, where we had to cross the river. The dug-out was up-stream, and a *creole* who offered to fetch it, was horrified when I said I was going to wade across. He warned me that the cold water would send the blood to my head. All these men have a horror of bathing when the sun is up. I took the precaution of wetting my head before starting across, and shortly we were all on the far side, where we found a tree loaded with bitter oranges. They were the most delicious things I ever tasted. The memory stays with me still. By half-past two in the afternoon we were in El Cayo, safe in Schufeldt's "go-down."

Oh, the joy of clean clothes and a clean shave! We went to Dr. Patterson for cocktails and dinner. You cannot

really appreciate iced drinks until you have been two months without them. Next morning Robson went off to Benque to see about selling his mules. We feared he would have a poor chance of getting a decent price because times were bad ; also people would think that, as he had finished his trip, he would take anything they offered. If the mules were not sold that day they would have to be put out to pasture until a buyer came along, but that would not be until August or September. Ken and I could see no good to be achieved by staying on. We could not help Robson, so made arrangements with a launch to take us down to Belize next day, at a charge of twelve dollars for the two.

We left on the launch, *Minerva,* at five in the morning. The breeze was pleasant and we spent most of the day in our hammocks. We arrived at Belize on the following day and went straight to the International Hotel, where we got quite nice rooms opening on a big verandah. Our welcome was most cordial. Everyone was anxious to know about the expedition and how Jim's accident had occurred. We learned that Jim had gone by plane to New York for proper surgical treatment and that he was doing well.

Robson turned up a day or two later. Meantime Ken had a cable that his mother was ill, so left on the 16th. I could not go with him because my money had not arrived. I tried hard to get passage on a tramp going to Europe by way of New Orleans, New York and Bergen, but the Captain had been caught taking passengers on the last trip and would not risk it again. I had another sharp go of fever which made me feel extremely unwell for a couple of days. But thirty grains of quinine for four days on end pulled me round and I shook it off.

The British Museum Expedition returned to Belize from a place near Punta Gorda. Captain Gruning, Nelson and Ashton, the leaders, told me that they had had a bad time. There had been much more rain in the south and they had been nearly drowned out. Their job had been to get out two big stelæ with a tractor, but the tractor had overturned in trying to cross a river, and the job of salving the heavy mass of stone had been terrific.

A number of people had gone home on leave, others were

out at the Cays, so Belize was very quiet. The only excitement was the execution of a schoolmaster who had won a lottery and murdered his wife. British Honduras has no State executioner and the law is that one of the high officials has to do the deed if no one else can be found. If a prisoner volunteers he gets a remission of part of his sentence, plus twenty-five dollars and a free passage out of the Colony. This time a prisoner was found to do the job, but the Commissioner of Police and other officials who had to be present at the execution, came into the hotel, and it took a good many drinks for them to get over the unpleasant recollections of the morning.

My money arrived, but was running away so rapidly that I decided to leave without delay. The only boat available was the *Connector* which plys between Belize and Jamaica, and lies up at Belize for four or five days after each voyage. I had a busy time dashing round to say good-bye to my friends, and most of them took the opportunity of coming aboard to see me off.

We sailed on May 30th, and though the ship was quite small, I found her very comfortable. The British Museum party were my fellow-passengers. I had a long talk with Gruning, who was keen on exploring the Chincana Tunnel, near Cuzco, with me. At Kingston, which we reached on June 2nd, I put up at the Melrose House Hotel. Kingston is a big city compared to Belize and has plenty of trees and greenery. Constant Spring Golf Course, where the magnificent new Club House is being built, must be one of the most beautiful courses in the world, with its emerald green fairways surrounded by irregular hills showing every shade of colour.

I went up to Newcastle, four thousand feet above sea-level. It was delightful to feel cool again.

Mrs. Fraser, who owned the hotel, a woman of fifty, told me many interesting things about the coloured population of the island. She said that, although slavery was abolished nearly a hundred years ago, she remembers, as a child, her father thrashing men and women slaves when the slate of their week's crimes was produced on Monday mornings. It was quite a ceremony and the whipping did not imply

brutality, merely correction. The slaves were not stripped, tied to a post and knouted, merely held by the arm and whipped round. In the case of the women she remembered that their clothes stood out, palpably starched for the occasion.

The ninth day after a death is a great ceremony with the negroes, to free a soul of the deceased from all earthly trammels, also to make certain that the survivors will not be haunted. The ceremony starts with prayers and speeches, everyone squeezed into a little stuffy room, but the real business of the evening comes later, with an orgy of eating and drinking. A day or two later, aboard the steamer, *Jamaica Merchant*, on which I had left for home, I met Mr. Vincent Hall, English by birth, but now a naturalized American. He is a lecturer who has travelled all over the world. Hall, who was born in Jamaica, told me much about the colour question. A mighty problem, he said, which, one day, will be a world trouble.

Black, remember, is a term which includes not only the negro but all people who are not white, and therein, so far as the West Indies are concerned, lies the present salvation of the whites, for the true blacks have as much contempt for the half-caste as they have hatred for the white man. It is a curious point that the black man has just as much scorn for one of his own colour who marries a white girl, as the white man has for the black when the position is reversed. Colour grade against colour grade prevents a united front against what they consider the common foe.

There is in Jamaica a negro lawyer named Marcus Garvey, a really brilliant orator, and a man of considerable talents. He and his followers make most inflammatory speeches, but are clever enough not to indict the Government, which is a punishable offence. They rail against the whites. To my mind there is serious racial trouble brewing in more than one of the West Indian Islands. It must be remembered that the black population enormously outnumbers the white, and it is certain that, if the blacks were able to combine, a rebellion would be a very bad business. But safety lies in the fact that they are always quarrelling among themselves.

The same sort of thing was happening in South Africa thirty years ago. A great slaughter would be arranged for a certain day when each house-boy was to kill his *baas*, but in the interim some quarrel would always arise as to the division of the spoils, and the rising would fizzle out.

Before the war I was up at a place called Haaman's Kraal, beyond Pretoria, making a road, with a force of about a hundred natives. The native Commissioner, who was responsible for an area containing thirty thousand natives, sent me a message that he feared a rising, and that I must watch my boys carefully. If trouble came I was to ride for his place where he, his wife, the Assistant Commissioner, and four native policemen whom he considered loyal, would try and hold out till help came.

For the next week I had an anxious time. I kept my pony saddled and watched the boys the whole time. These boys came from a different part of the country, so I hoped they might remain loyal. Early one morning I saw heads appearing over a low-lying crest of hills a couple of miles away. Thoroughly scared, I jumped on my pony ready to save my skin. Then I paused. I could not ride off at once, for, first, I had to find out whether or not my men were concerned in this rising. If they were not I could not leave them to be massacred, while if they were, they would make short work of me. So I sat my pony in a very uncomfortable frame of mind, for what seemed ages, but what was in reality, I suppose, not much more than three minutes.

More and more figures appeared over the skyline, and I saw with relief that they were making no attempt at concealment, so this could not mean an attack. Next four ox waggons came over the rise, and I rode slowly forward to meet them. They were a force of South African Constabulary.

The usual thing had happened. A rising had been planned in which half a dozen tribes were involved, but the two strongest tribes had quarrelled, and now the S.A.C. were bringing in prisoners and wounded in the waggons.

On my return to England I found that the Sacambaya Company had gone into voluntary liquidation. For some

reason the scheme of getting the subscribers to test out the theory of the photographic emanations was dropped, and that alone would have been the means of obtaining fresh capital.

Before the general meeting I heard of several subscribers who had prepared what they considered to be " awkward " questions, but after the whole situation had been very ably explained by Hilgarth, and the cinema film showing better than any words the amount of work that had been carried out, there was not one question asked!!! We had blasted and cleared away over fifty thousand tons of hard rock, earth and stones in the eight months we had worked.

In my opinion the treasure is buried there, but even though the Government put no obstacles in the way, it would be an almost impossible task to get it safely out of the country—three bandits could hold up an army of mules —the only means of transport unless one employed an airship, and the difficulties of landing would be immense.

Nor could permission be obtained by the British Museum to excavate in Cuzco, President Leguia had been deposed, and the Peruvian official in charge of archæological research was averse to " foreigners," owing to an American borrowing relics he had unearthed there for an exhibition in his own country.

I was tired of mules and trudging over forest trails and decided to buy a small ship, and wander over the waters with the idea of the treasures of Cocos in the offing. I went. I returned. I am now off again.

THE END

JOHN LONG, LTD., PUBLISHERS, LONDON, ENGLAND, 1934
WILLIAM BRENDON AND SON, LTD., PRINTERS, PLYMOUTH